ABSTRACT
        Nineteen of the papers presented on the theme
"Learning to Read, Reading to Learn," are included in this report.
Articles on basic considerations in reading instruction are
"Children's View of Language," "Early Reading from a Biological
Perspective," "Pygmalion in the Reading Circle," "Dealing with
Feelings and Emotions in the Classroom" and "Nonverbal Communication
in the Classroom." Specific articles on procedures, techniques, and
proposals are "A Structure for a Reading Program K-12," "Aiding
Secondary Subject Teachers in Guiding Reading Growth," "Corrective
Reading for the Classroom Teacher," "Bibliotherapy in the Classroom,"
"Some Thoughts on the Use of Role-Playing in the Classroom,"
"Listening and the Classroom Teacher," "Individualized Reading," "The
Teaching of Poetry," and "The Change Process and Teacher
Preparation." Evaluation of reading programs is discussed in "A
Comparison Study of Four Methods of Developing Reading Readiness
Skills," "Reading Readiness Skills Acquisitions by Two Methods: A
Traditional Reading Program and a Kindergarten Science Curriculum,"
"Science Content Readability as Determined by the Cloze Procedure,"
"The Readability of Intermediate Social Studies Texts," and "The
Impact of 'Sesame Street.'" (MKM)

## PROCEEDINGS FROM THE

# TRANSMOUNTAIN FAR WEST REGIONAL READING CONFERENCE

**SPONSORS**
VANCOUVER ISLAND COUNCIL OF THE INTERNATIONAL
READING ASSOCIATION and the
UNIVERSITY OF VICTORIA

**THEME**

# LEARNING TO READ READING TO LEARN

EDITED BY
LLOYD O. OLLILA / EDWARD G. SUMMERS /
JOHN DOWNING / PAUL J. VIEL

## CONFERENCE COMMITTEES

| | |
|---|---|
| Chairmen, Conference | Lloyd Ollila, Past President, Vancouver Island Council of I.R.A. |
| | Norma Mickelson, University of Victoria . |

### Committee Chairmen

| | |
|---|---|
| Audio-Visual | John Shaw, University of Victoria |
| Decorations | Ann Schafer, University of Victoria |
| | Margaret McCurrach, Victoria Public Schools |
| | Phyllis Hatch |
| Exhibits | Eileen E. Sargent, Marquette University |
| | Terry Johnson, University of Victoria |
| Hospitality | John Downing, University of Victoria |
| Housing and Hotel | Sister Theodoric, St. Andrew's Catholic School |
| Mailing | C. Godfrey, Victoria Public Schools |
| Meals | H. Fisher, Sooke Public Schools |
| | P. Stewardson, Sooke Public Schools |
| Music | Oak Bay Band |
| Publicity and Printing | Peter Evanechko, University of Victoria |
| Programme | Lloyd Ollila, University of Victoria |
| | Kathleen Ollila |
| Programme Cover Picture | Jim Jickling, University of Victoria |
| Registration | Marge Littley, President Vancouver Island Council of I.R.A. |
| | Ron Seward, Victoria Public Schools |
| | Al Fry, Saanich Public Schools |
| | Dennis Langlois, Saanich Public Schools |
| | Allan Newberry, Sooke Public Schools |
| | Janice Cleugh, Sooke Public Schools |
| | Taimi Hindmarch, Saturna Island Public Schools |
| Signs | Belmont Senior Secondary School, Sooke, B.C. |
| | Elisabeth Fisher Junior Secondary, Sooke, B.C. |
| Table Decorations | Lampson Street Elementary School, Victoria, B.C. |
| | Oaklands Elementary School, Victoria, B.C. |
| | Monterey Elementary School, Victoria, B.C. |
| | Brentwood Elementary School, Brentwood Bay, B.C. |
| | St. Andrew's Catholic School, Victoria, B.C. |
| | Frank Hobbs Elementary School, Victoria, B.C. |

-3-

# CONTENTS

EVALUATION OF READING PROGRAMS

# INTRODUCTION

This volume contains nineteen of the papers presented at the

second annual Transmountain/Far West Regional Conference of the

International Reading Association held in Victoria, B.C. The authors

are scholars and teachers concerned with various aspects of reading education.

They explore topics that range from evaluation of reading programs to

procedures and methods used to teach reading.

The reading conference from which these papers were taken was

the largest regional reading conference in North America in 1973 with

2,500 people attending. We thank you, readers, who attended the conference

and welcome you and others who did not come to a careful and reflective

reading of these papers. You will find it to be a rewarding experience.

A special thank you is given to the editors of this collection of

papers: Dr. Edward G. Summers, Dr. John Downing and Mr. Paul J. Viel.

Dr. Lloyd Ollila
Conference Chairman
and Co-editor

CHILDREN'S VIEWS OF LANGUAGE

John Downing

University of Victoria

THE LANGUAGE/THOUGHT PARADOX

The two most important scientific investigations of children's
thought and language have been without doubt those made respectively
by Jean Piaget and Lev Vygotsky. Their conclusions are essentially
complementary and support each other although the former condicted his
research on children in Geneva while the latter's subjects were
Russian boys and girls. In a previous article I have reviewed American
and British research on children's thinking which leads also to
essentially the same conclusions (Downing, 2). All these findings
present the teacher with a paradoxical problem of great importance in
the teaching of language skill.

Piaget's (7) finding in his original study was:

"Verbal forms always evolve more slowly than
actual understanding."

In other words, the natural learning process of child development is
for the child to understand an idea first before he can describe it in
language. Recently, with the assistance of his colleague Bärbel
Inhelder, Piaget (8) has reviewed and summed up the whole of his life-
time of research on child psychology, and in this latest book he makes
the following important statement:

"Language does not constitute the source of logic
but is, on the contrary, structured by it."

For example, in learning to read, when a child has understood the logic
of how vowel letter pairs usually operate in English spelling, he
might then be able to express his discovery verbally as follows:
"when two vowel letters come next to each other, usually it's the first
one that tells you what the sound is."

But, all too often the formal teaching of synthetic phonics
attempts to reverse nature by making children learn by rote such verbal
formulae as: "When two vowels go walking together the first one does
the talking", before they have understood the basic logic.

Vygotsky's (10) observations of children's thought and language
led him to warn teachers about the futility of such reversals of the
natural process:

> "Direct teaching of concepts is impossible and
> fruitless. A teacher who tries to do this
> usually accomplishes nothing but empty verbalism,
> a parrot-like repetition of words by the child,
> simulating a knowledge of the corresponding
> concepts but actually covering up a vacuum."

Thus what teachers believe they are teaching and what their children
actually are learning may be two very different things. This lack of
communication is bound to exist in schools where teachers ignore the
child's natural way of learning concepts and the language related to
them. But let us assume that all of us here today wish to avoid this
wasteful pedagogical error. If so we need to inquire how is it
possible to make a child-centered approach to the learning of language
skills when teaching through language is fraught with the danger of
merely "covering up a vacuum"? Are we to teach language without language?

- 2 -

3

Of course not. Vygotsky condemns not all teaching through language, but only those language formulae for concepts which children have not yet understood. However, this does not entirely resolve the problem. Supposing the concept is to do with language itself. Supposing the child does not yet understand this concept about language. How can the teacher help the child to develop the language concept without using language?

All this may sound terribly confusing to you, but it is much worse for the child trying to sort out the problem when the teacher has not sorted it out in his own mind.

The vital distinction we must make is between two possible ways of presenting information about language to children:

    (1) We can give children experiences of <u>language-about-language</u>.

or    (2) We can give them experiences of <u>language itself</u>.

"When two vowels go walking...." is language-about-language which results in worse than the vacuum described by Vygotsky. As I have shown in another article (Downing, 3) this language-about-language approach is the type of experience which causes children to learn that reading and writing are meaningless rituals to be performed only to please adults.

LANGUAGE EXPERIENCE AND THE DEVELOPMENT OF CHILDREN'S CONCEPTS OF LANGUAGE

If children are to understand the nature of language and the logic of its relationship to the written form, experiences of teachers' language-about-language is worse than useless. For this purpose we need to give children instead genuine real-life experiences of language

itself, for as Piaget has demonstrated in connection with the child's development of thought in respect of mathematics for instance, understanding of the concepts involved depends on his actions with concrete examples. Learning to read and write, with its attendant understanding of the several linguistic concepts involved, is just as much a problem-solving task as mathematical learning. But, strangely, educators seldom seem to recognize that learning to read constitutes a set of problems to be solved by the child, although they readily admit this is the case in the child's learning of mathematics. Perhaps, literacy seems to adults to be merely a simple extension of oral language, whereas numeracy appears to be a special subject separate from previous experience in action or language.

Actually, for the school beginner both literacy and numeracy are equally related to his previous experience in action and in language. There are many logical similarities between the learning of literacy and learning mathematics. For example, both involve codes. Moreover in both cases a double code is involved. In math we use words like "one", "two", "half", "twice", etc. which themselves constitute as abstract code for more concrete entities. This is the primary code. Then the child must relate this to a secondary written code with symbols such as "1", "2", "1/2", "2x", etc. Recognition of such steps has revolutionised math teaching in recent years by giving priority to children's conceptual learning instead of the rote learning of verbal formulae - whether spoken or written.

- 4 -

But the same principle applies with at least equal strength in
learning to read and write. All our spoken language is a primary code
for representing concepts abstracted from the experience of reality.
Written language is a secondary code of visual symbols for the primary
code of speech. Therefore, the priority in this field, too, must be
given to children's learning of the concepts of literacy instead of the
rote learning of spoken or written verbal formulae.

## WHAT IS "DECODING"?

This is the grave error of those approaches to reading instruction
which have been mis-named "code oriented" methods. They attempt to
teach children to decode before they understand the concept of a code
and the other concepts involved in the decoding and encoding processes.

My research over the past four years has discovered clear evidence
that normal beginners do not understand the basic concept of written
symbolization either in the special area of math or in language in
general. They have no notion of a code in which one thing can represent
something else. Therefore, the child has a much more difficult task
than simply learning to decode writing to speech or to encode speech
into written symbols. He must solve the problem of what is a code and
what are all these aspects of the code which the adults talk about as if
they were self-evident, e.g. "word", "sound", "letter", "number",
"reading", "writing". (For research evidence see Downing, 5).

- 5 -

1 1

Faced with the problem of relating adult talk to the samples of written language related to it, the young child tries to guess what people mean by these terms. He develops hunches and tries them out to see if they work. By a series of intellectual trial and error attempts and with appropriate experiential feedback he arrives closer and closer to the generally accepted concept. (Downing, 6).

These research studies have led me to propose a "cognitive clarity theory of reading" (Downing, 4) which postulates that "the learning-to-read process" consists "in a series of solutions to the sub-problems which constitute the total complex problem of finding out how to read....
As the child's attempted solutions approximate more and more closely to the reality of each aspect of the reading process, so he will achieve more and more <u>cognitive clarity</u>. The best measure of a child's progress in solving the learning-to-read problem, therefore, should be his degree of understanding of the nature of the task. Thus, cognitive clarity will be correlated most highly with reading success, while failure in reading will have as its chief symptom <u>cognitive confusion</u>."

## DEVELOPING COGNITIVE CLARITY

As we have seen above, giving children verbal formulae at best does no more than conceal a vacuum in the child's understanding, because this usually amounts to nothing more than language-about-language. What the child needs to help him solve these problems is numerous concrete examples of the concepts to be learned. For this purpose, the language experience approach is the most valuable technique available to reading teachers.

The first and most important language concept the child must
develop is that of the _purposes_ of the written form of language.  As
Vygotsky's research showed, the young beginner starts with "only a
vague idea of its usefulness."  The various methods encompassed by the
language experience approach all provide children with concrete
demonstrations of the communicative and expressive purposes
language.  Probably, the most important of all are his own experiences
as an author.  Through these he can perceive clearly why an author writes
and why a reader reads.  When a reader or a writer shares his activity
with a beginner this is another excellent source of experiences of the
purposes of literacy.

Similarly, the language experience approach provides the best
opportunities for developing specific concepts of literacy, e.g.
"sentence", "word", "writing", etc.  If the teacher is aware of the
child's problems in developing these concepts he will be careful to use
such terms clearly and consistently in his incidental conversations
accompanying the writing activities of the language-experience approach.
For example, such a teacher will take care to see that the spaces between
the words on the written charts clearly mark the boundaries between word
units, and when he writes he can talk about "this word" and "now the
next word" etc., as he writes them.  This will seem quite natural
to the child of this age who is still at the egocentric stage in which
such "collective monologues" (cf. Piaget) are a normal accompaniment to
actions such as writing.

There should also be activities with the spoken language alone which
will help children to develop these linguistic concepts.  Children should

understand such concepts as "spoken word" and "phoneme", for example, before they learn how to code them in writing. It is of little value for a child to learn the written code symbol for something which doesn't really ^   n hi; own mind. Indeed it will hamper the child's development of t..e concept of a code if the code symbols taught repre-sent nothing in his view of reality. This is the case where formal phonics teachers say, for instance, that "the letters ta say 'ta'" and the child has no concept of: (1) a phoneme; (2) the particular phonemes /t/ and /a/; (3) letters.


## EXTENSION OF THIS PRINCIPLE

In this paper I have focussed chiefly on the conceptual problems of the very young beginner, but obviously the principle of beginning from the child's own level of development in language and thought must be extended to all other aspects of language teaching; vocabulary, grammar, etc. - all should be based on this same principle.

For example, Amy Brown, John Sceats and I in our new book, Words Children Want to Use (1) have shown how primary dictionaries may be constructed from the child's view of language instead of that of adults. Our developmental research in Britain and North American has shown that this is a practical proposition since it has resulted in a series of dictionaries based on children's choice of vocabulary and the way that they define the words selected (9).

With William Shakespeare as our guide, perhaps our language-experience motto should be:

> Suit the action to the word, the word to the action;
> with this special observance, that you o'erstep not
> the modesty of nature.

# REFERENCES

1. Brown, Amy, Downing, John and Sceats, John. Words Children Want to Use. Edinburgh: Chambers and New York: Pyramid, 1971.

2. Downing, John. "How Children Think About Reading". Reading Teacher, 23 (December 1969), 217-230.

3. Downing, John. "Relevance Versus Ritual in Reading". Reading, 4 (June 1970), 4-12.

4. Downing, John. "Specific Cognitive Factors in the Reading Process". In Yearbook of the National Reading Conference for 1970. Milwaukee: National Reading Conference, 1971.

5. Downing, John. "Children's Concepts of Language in Learning to Read". Educational Research, 12 (February 1970), 106-112.

6. Downing, John. "Children's Developing Concepts of Spoken and Written Language". Journal of Reading Behavior, 4 (Winter 1971-72), 1-19.

7. Piaget, Jean. The Language and Thought of the Child (Rev. Ed.) London: Routledge and Kegan Paul, 1959.

8. Piaget, Jean and Inhelder, Bärbel. The Psychology of the Child. New York: Basic Books, 1969.

9. Pyramid Primary Dictionaries. New York: Pyramid, 1971. (In Britain known as The Young Set Dictionaries. Edinburgh: Chambers, 1971).

10. Vygotsky, Lev. Thought and Language. Cambridge, Mass.: M.I.T. Press, 1962.

# EARLY READING FROM A BIOLOGICAL PERSPECTIVE

W. Ragan Callaway, Jr.

The Ontario Institute for Studies in Education
and
University of Toronto

One of the most intriguing phenomena in education today is the increasingly large number of children who are learning to read early. Many children are entering our public schools as good readers, some having learned as early as two years of age. Every generation produces a few early readers, but it appears that there are more now than at any time in history.

This statement is highlighted for me by a specific reaction from one of my professors in the late fifties. This professor, who had earned his Ph.D. at the University of Chicago with William S. Gray, was a well-known authority on reading, having written a number of textbooks on the subject. During a class discussion on reading, I asked him how he would rationalize demonstrated reading competence in a three-year-old child. He answered that in his thirty years of professional experience he had never actually seen a child younger than five who could read. He then added with some intensity that he had once seen a picture of a four-year-old boy reading the Chicago Tribune, and that although he was not able to follow up the case, he was certain of one thing: "If that child continued to read the Chicago Tribune until he was six, he did not have eyes to read with when he went to school".

Perhaps we see what we expect to see, but it does seem reasonable to assume that there were fewer early readers in the years between 1929 and 1959 than there are now. In any case, since 1959 I have personally observed scores of children under five who could read fluently, including at least a dozen who were not yet three years of age.

Psychologically there is a very good reason why early readers tend to be overlooked: early reading is theoretically inadmissable. Within current theoretical frameworks it is difficult to account for reading at four, and quite impossible at age two. The difficulty inheres in the fact that conventional general process theories of learning depend upon general intelligence as the exclusive source of mental ability. This difficulty, though real enough in its effects, is based on a false supposition, as general intelligence alone cannot possibly account for numerous mental abilities observed in animals and man. We have been so intent on constructing one general theory of learning that we have resolutely ignored any evidence that learning is not equipotential. The equipotentiality assumption, which is an integral part of all established learning theory whether it be behavioristic or cognitive, holds that all learning is carried out by the same kind of mental processes. This assumption quite obviously makes any act of learning essentially like any other act of learning. The processes learning theorists are concerned with, then, are the processes that constitute general intelligence.

Ethologists (biologists who study animal behavior) have consistently and with all desirable clarity set forth irrefutable evidence that the equipotentiality assumption is invalid. All animals are capable of performing "mental" tasks too complex to be explained in ter.s of the general intelligence characteristic of their particular species, and man, it must be emphasized, is no exception to this rule. Man's precocious capabilities in form perception and language, among others, cannot be explained within the framework of equipotential learning theory. That is, they cannot be explained in terms of general intelligence defined as IQ level or mental age.

The purpose of this paper is to show how biological research may be utilized to promote an understanding of early reading as well as other aspects of early learning. Biologists have much to offer in this respect because they not only have substantiated the existence of capabilities that are essentially independent of general intelligence, but they also have generated, through concurrent investigation in several

sub-fields, a credible rationale for the timing and development of these
special capabilities in ontogenesis. The point at issue is the necessity
and nature of special capabilities that do not depend upon the processes
of general maturation for their initiation and development. Only recently
have we begun to recognize that such capabilities exist, and there are
very few books in the fields of education and psychology that deal
explicitly with this problem. Probably the best is the excellent work
by Seligman and Hager (1972). However, the problem is many-faceted, and
some facets as recognized by ethologists, as well as others implicit in
the findings of modern genetics and brain research, are not treated in
this very important book.

To recapitulate: (1) many children between the ages of two and
five are learning to read; (2) this tends to be overlooked because equi-
potential learning theory, depending exclusively on general intelligence,
cannot plausibly account for reading during these years; (3) no established
alternative theory is available in education and psychology at the present
time, although a move has been made in this direction; (4) ethologists
for many years have demonstrated clearly that man and all animals have
abilities that are quite independent of general intelligence.

I became interested in early learning in 1958 when my first child
learned to read at the age of 2 years and 8 months. There was nothing
unusual or elaborate about the methodology used. He was simply exposed
to letters, words, sentences, paragraphs, and stories in a variety of ways,
in various casual settings. My "method" consisted mainly in closely
observing his reactions to my presentations and adjusting as needed.
Methodology may well be more important for the five and six-year-old
than it is for the two, three, and four-year-old. There is a distinct
possibility that the older child must consciously and deliberately
process many tasks having to do with learning to read that the younger
child, in response to appropriate stimulation, processes "naturally",
without effort, below the level of awareness. Although unthinkable
within existing theoretical frameworks, the above possibility is a
rational, thoroughly legitimate hypothesis when one considers the
empirical data in the light of ethological and linguistic research.

The details of methodology are relatively unimportant, in my opinion, when compared to the theoretical inadequacies which unnecessarily hinder current research on early reading, and they will be omitted in the following account.

Like most parents of very early readers, I had deliberately set out to teach my child how to read. Although it is more fashionable to perpetuate the double myth that most early readers do and should learn to read spontaneously, the vast majority of individuals who learned to read early, at least among those for whom we have adequate records, did so because they were deliberately taught this skill (Cox, 1926; Goertzel & Goertzel, 1962).

I presented the first three letters of the alphabet to my son one night when he was 23 months old and was delighted when he recognized them the next day. Knowing the names of all the letters within a month, I began presenting individual words to him. During the period between 2 years 0 months and 2 years 8 months he learned about 200 words and acquired a rudimentary knowledge of phonics. At this time he suddenly discovered "how to read sentences" and on his own initiative began reading simple trade books. At this age he was able to successfully attack most new words that he encountered. By the age of 2 years 8 months he also had developed an insatiable appetite for having stories read to him. I became curious about how long he would listen to me read without losing interest, so I decided to read to him as usual one night but to continue as long as he showed interest. I placed a large number of his favorite books beside the bed and began reading to him at about nine o'clock. Unfortunately, my staying power was not equal to his, and when my voice began to crack about two a.m. I was forced to stop. His eyes were as wide open and alert when I closed the last book as they were when we had started five hours earlier. To underscore the fact that he was ready for more, he softly cried in protest before drifting off to sleep.

The next four months were not only extremely exciting and rewarding for my son, but were also the most crucial four months in my own professional experience. Although physically active and robust, he spontaneously

read an average of four to five hours per day adding 600 new words to his
recognition vocabulary. By the age of 3 years 0 months he had a recognition
vocabulary of 800 words and tested at the third grade level on several
standardized reading tests.

Could general intelligence, produced gradually by the processes of
general maturation, account for this behavior? What level of IQ would
be necessary? Simple calculations based on equipotential learning theory
and the structure of intelligence tests require an IQ far in excess of 200.
Taking into account that my son would have needed an IQ of 200 at age three
to be equal in general intelligence to an average child of six, and
remembering that he was reading at the level of an average eight-year-old,
the inadequacies of current learning theory can readily be seen. Obviously
an ability factor is operating here in addition to general intelligence,
but established theory, being shackled with the equipotentiality premise,
is powerless to cope with it in any relevant way. Alternative explanations
such as high motivation, parental pressure, improved methodology, personality
factors, behavior modification and stimulating environment are often put
forward to explain such precocious behavior, but these are specious
solutions. However important these factors may be in other contexts, they
neither confront nor rationalize away the theoretical difficulties mentioned
above. The problem remaining is that of specialized capacity. Equipotential
learning theory based on the concept of general intelligence can offer no
credible rationale for the capacity demonstrated in the precocious behavior
of my son and the thousands of other children who learn to read very early.
The processes of general maturation, however well they may be accelerated
by environment manipulation, develop much too slowly to account for this
kind of behavior.

While general intelligence clearly could not be the source of many
skills demonstrated by the fluent reader of two, it is obviously affected
by the exercise of these special skills. This fact, when seen in terms
of its biological basis and its general educational implications,
provides a provocative, well-grounded rationale for experimental research
in early reading with all IQ levels. By utilizing the special genetic
information which facilitates early reading, we may concomitantly

increase general intelligence.   The key to realizing this possibility, however, lies in recognizing that the special facilitation we are alluding to comes, as we shall see, in the form of two overlapping sensitive periods -- for form perception and for language acquisition.

Having said much about the impotence of the equipotentiality premise, along with its necessary reliance on general intelligence, in accounting for early reading, more evidence must be given from the science of ethology concerning its utter lack of credibility.   A major tenet of ethology is that every animal possesses specific capabilities that are characteristic of its own particular species.   Sometimes these capabilities are almost completely built-in;   at other times specific kinds of environmental input is essential for appropriate activation of the innate genetic program. In both instances the ethologist is speaking of highly specialized genetic information that has been incorporated into the genetic masterplan. There is a popular misconception that specific genetic factors must operate independently of environment input or they are not "really" built-in. This is as erroneous, according to ethological research, as the related belief that if learning is involved, specific innate factors cannot be operating.   The point is that specialized genetic information works in many ways, the parameters of which must be determined empirically for each individual case and for each species.   Ethologists have thoroughly studied many examples of behavior that are essentially determined by specialized genetic information alone, and many other examples where the genetic information is completely dependent on specific environmental input, often during sensitive periods in development.   Where environment input is necessary, it is important to remember that nature appears to have devised an almost endless variety of mechanisms for the purpose of guiding the behavior and learning of living organisms.   It must also be kept in mind that when the genetic information facilitates learning in any specific way (i.e., other than through general maturation) we are dealing with phenomena that are by definition not equipotential.

Many specialized abilities and forms of knowledge in animals are exceedingly complex and can only be acquired with difficulty, if at all,

- 16 -

22

by man. This fact alone obviates the equipotentiality assumption, since nature has undeniably provided a "short-cut" to knowledge by furnishing specialized genetic information to the organism. In other words, while the demonstrated ability is often intrinsically complex, the animals concerned "learn" and exercise the ability easily and "naturally". For example, some birds fly to distant places by celestial navigation. Characteristically, some species apparently need input from certain star configurations over a period of time before they manifest this ability (Emlen, 1970), while others need no previous exposure to the night sky before displaying this ability in full-blown form (Sauer, 1958). In both cases, of course, the built-in genetic facilitation is apparent. In the first case, the genetic information operates by making the bird highly reactive, and cognitively receptive, to particular star patterns, thus guiding the learning of the animal in a very specific fashion. In the latter case the genetic information is complete enough to produce the ability by internal mechanisms alone, without the necessity of particularized environmental input during a sensitive period, or indeed at any time during development.

The Lesser Whitethroat Warbler spends the spring and summer in northern Europe and the fall and winter near the headwaters of the Nile in Africa. One characteristic of this bird had intrigued ethologists for sometime; after hatching and living its first few months in Europe, it flies alone, mostly at night, to its winter home in Africa. How does the bird guide himself? Sauer, an ethologist in Freiberg, Germany, looked into this question by means of some very clever experiments and obtained clear-cut results, (Sauer, 1958). He hatched a number of birds indoors and raised them in a constant environment. This procedure prevented the birds from receiving any input from daily and seasonal changes in temperature and light conditions. It was observed that twice a year, at the times of the year they would normally migrate, the birds became very restless and remained so for about the time it would take to fly, at about 100 miles per night, to Africa. This behavior, in addition to demonstrating the presence of remarkable internal timing mechanisms, made a most unique experiment possible.

In addition to specialized genetic information designed to make
the birds want to fly at two highly delimited times during the year
(probably by the production of hormones, under the control of the genes,
that affect certain ares of the brain), there is also specialized genetic
information designed to guide the bird in its flight to Africa in the
fall and to Germany in the Spring.   The navigational knowledge available
to the bird is thus dependent upon the season of the year.   Either
specialized hormones (which could be produced either by small groups of
neurons--i.e., produced by gene action within these neurons--within or
near the areas of the brain responsible for processing the information
(De Robertis, 1972) from certain star configurations, or by glands--i.e.,
produced by gene action within glandular cells - in other parts of the
body and then carried to the brain by the blood) or some other kind of
gene product must be responsible for this specialized knowledge of
celestial navigation that accompanies the desire to fly.

The critical and most original part of his experiment began when,
during periods of physiological readiness, Sauer would remove individual
birds from their environment of eternal summer and place them in covered
cages under the artificial sky of a planetarium.   The cover was then
removed so that the bird could see the night sky but nothing else outside
his accustomed cage.   If it saw the stars as they would normally appear
over Freiburg in early fall (and if the season were indeed the fall,
because the bird "knew" what season it was and was physiologically
prepared to fly one route in the fall and the opposite route in the
spring) it would immediately orient its body, by pointing it like a
compass, toward the southeast - the direction it would take if allowed
to go to Africa.   If the artificial sky were shifted to represent
northern Africa, the bird then pointed due south which would be its
actual route from that geographical location.   To test the flexibility
of the bird's built-in capability, Sauer presented it problems that would
never occur in nature.   For instance, as one bird was oriented toward
the southeast and flapping its wings happily, the sky was suddenly
shifted to represent central Siberia, more than 1,000 miles east.
After a period of indecision the bird "headed" due west toward Freiburg,
remaining on that course until the sky showed that he was over Freiburg,
where he immediately turned southeast once again.

Here we have an excellent example of a high-level "cognitive" ability ('cognitive', because information processing of considerable complexity, flexibility and abstraction is involved even though it is obviously not calculated in terms of the bird's mental awareness) that is almost entirely provided by specialized inherited information - and within a tiny pea-sized brain at that. How much general intelligence would be necessary if this ability had to be acquired equipotentially? Clearly more than many normal humans have. Examples of this kind could be multiplied indefinitely from the large storehouse of ethological research.

Man also has some almost totally built-in abilities. The ability of the six-month old infant to "know" the real shape of an object regardless of its orientation in space (Bower, 1966) is in this category. The intrinsic complexity of this ability is attested to by the fact that while scientists are able to build automatons that play an excellent game of chess, they have not been able to build an automaton that can perceive simple objects variously oriented in space, based on an input from multiple TV cameras, sufficiently well to move about without constantly bumping into them (Loehlin, 1971). There are many other complicated built-in "constancy functions" in man of which we tend to be unaware because they are automatic (Lorenz, 1969). Within the frame of equipotential learning theory there is no credible way to explain how these abilities come to be, especially in the very early stages of development.

Among the most important special capabilities, in terms of educational implications, are those pertaining to form perception and language acquisition. These capabilities obviously require relevant input from the environment for actualization of the specialized genetic information. Infants have a much more sophisticated visual system than was previously thought. Human infants are able to perceive visual patterns at birth (Frantz, 1965), and before the age of three months they have an extraordinary ability to discriminate between patterned configurations. At this stage in their development they can discriminate between patterns

as complex as letters and words (Frantz & Nevis, 1967). Additionally, infants show a preference for certain patterns relative to others at various stages of their early development that cannot be attributed to the capacity of the visual system per se, or to experience. This demonstrates built-in selectivity as well as remarkable power to manage complexity (Frantz & Nevis, 1967). It is inconceivable that the infant could acquire all of its visual information equipotentially; nevertheless, most authorities in early education assume precisely this. In short, the infant's visual system is finely tuned to register, independently of general intelligence, certain kinds of high-fidelity information from the external environment that is pertinent in learning to read.

A critical attribute of the form perception capabilities referred to above is that they must be exercised adequately in their initial stages or they regress (Ganz, 1968; von Senden, 1960). In other words there is a type of sensitive period for form perception. Could this help explain the fact that while infants can easily discriminate between letters, many older children and adolescents who have not learned to read cannot? Since the majority of reading failures result from an inability to master form perception skills (Chall, 1967), it is not unreasonable to hypothesize that appropriate early experience in recognizing letters and words would prevent many of these failures. In any case, programs for beginning readers could hardly be valid, or at least optimally efficient, if they are inconsistent with recent findings concerning special form-perception abilities in the young child.

The problem of language acquisition in the young child centers around the puzzle of the sentence. The sentence is a problem because traditional theory cannot account for the way a young child comprehends and constructs a sentence. This may sound odd as almost all children, dull and bright, adequately cope with the sentence--about as naturally and easily as birds guide themselves by celestial navigation--but it is one thing to have the ability and another to explain it satisfactorily. Linguists have plainly demonstrated, since Chomsky's breakthrough 16 years ago, that the abilities necessary for language acquisition are far too

demanding to be explained by reference to general intelligence and equipotential learning theory (Chomsky, 1957; Chomsky, 1966). The only alternative is that biologically based special abilities enable the young child to easily cope with problems too difficult to be handled by general intelligence alone.

Nature has provided for language acquisition in man in exactly the same way she has provided for specialized capability in every lower animal. Children between the ages of 18 months and 3.1/2 years acquire language effortlessly through the mediation of particularized information coded in their genetic material. As in scores of known instances with animals, environmental input is also essential if the particularized information in the genes is to be physiologically activated and thus behaviorally actualized. The purpose of the built-in information is to enable the young child's brain to process the language input so that literally hundreds of highly abstract and complex rules are unconsciously inferred (McNeill, 1966; Goldman-Eisler, 1964). These rules are so complex and theoretically difficult that it is doubtful if an intelligent adult would be able to master them sufficiently, by means of general intelligence alone, to generate sentences fluently. Moreover, linguists themselves are far from verbalizing all of them satisfactorily; indeed they are constantly uncovering additional rules that normal children unconsciously acquire without effort or direct instruction. It is the child's competence in utilizing these complex rules in understanding and constructing sentences that substantiates the existence of special language abilities. As in form perception, the ability to acquire language regresses if not exercised. Individuals who have not learned to understand and generate sentences by late childhood never learn to do so with normal facility (Lenneberg, 1967, pp.376-377). So the ability to acquire language is also delimited by a sensitive period.

One fact regarding the relationship between the sensitive period for language acquisition and early reading is obvious from the perspective of linguistics. The child is not taught to analyze the sounds of spoken language into meaning, this is accomplished spontaneously

by the child in a normal social environment. The child's brain is specifically structured and organized (this specialized organization is referred to by linguists as the Language Acquisition Device or LAD) by the genetic masterplan to complete this task before the age of four (McNeill, 1966). In fact, by the age of two the average child has already made considerable progress in analyzing the sound patterns of spoken discourse in terms of sentence structure and meaning. Instruction has little effect on this process, as distinguished from concept development which is furthered, of course, by direct tuition. Since the ability to analyze the sounds of language in terms of meaning and sentence structure is already a part of the child's knowledge, it is not an appropriate goal for reading instruction. Realistic goals build upon the child's knowledge, within the limits of his concept development, of the sound patterns of language. Just how other aspects of reading are facilitated by man's sensitive period for language acquisition is not clear, but there is evidence that the young child, when given the opportunity, is able to acquire the basic skills of reading almost as, easily and naturally as he learns to understand and speak his first language.

Although education unfortunately has remained a stranger to the ethological concept of special built-in learning capabilities, nature patently knows how to produce them. Evidence from many sources demonstrate nature's expertise in writing special purpose sub-programs into the genetic masterplan in order to bring about mental capabilities independently of the gradually developing processes of general maturation. Every animal, including man, has need of certain sophisticated capabilities that a gradually increasing general intelligence either cannot deliver at the appropriate stage of development or, in many cases, not at all. In man some of these capabilities, as we have seen, are pertinent to important educational skills such as reading.

When we speak of writing something into the genetic masterplan we would do well to note that there is one and only one language of life at the genetic level. Processes at this level are essentially the same whether they occur in virus or man (Watson, 1970, p.431). Life in all

its forms is written with the same four "letters" (the four nucleotides - adenine, thymine, guanine, cytosine), the same twenty "words" (twenty amino acids, each one coded for by a set of three nucleotides), and the same kind of extraordinarily long "sentences" (protein molecules which function either as enzymes or as structural elements, and are made by stringing amino acids together linearly in an endless variety of ways). The gene is a functional unit which codes for one sentence.

Working with a universal language over eons of time, nature has accumulated a vast repetoire of strategies for writing specialized information into the genetic material of living organisms. And nature did not suddenly find these encoding skills (we are referring here, as we have all along, to nature's ability to produce complex mental capabilities that function independently of general intelligence) superfluous when she came to man with his relatively high general competence. Although nearly all learning theorists and reading experts implicitly assume that nature no longer had need of these skills in the case of man, she clearly utilized them in producing the integrated system we call Homo sapiens. Man too is adapted to many special conditions of his existence by the production of mental capabilities that cannot be explained in terms of general intelligence. While it is true that general intelligence may incorporate many specialized built-in abilities at some later stage of development, this certainly does not obviate the critical need to recognize their existence, understand their function and experimentally explore all of their parameters.

The young child, as has been pointed out, is generously endowed with special capabilities in form perception and language. These capabilities occur too early and are intrinsically much too complex to be produced by the same gradual processes that produce general intelligence. We have turned a blind eye to the extensive array of evidence for this fact primarily, I believe, because we were not aware of a genuine theoretical alternative. Since we see and understand things in terms of our basic assumptions, evidence which does not fit tends to be shunted aside and dismissed. Practically all arguments against early reading are based on an invalid assumption concerning the role of general intelligence in

learning to read. Likewise, practically all who advocate the teaching
of beginning reading later than age six base their conclusions on the
same invalid assumption. Given that assumption; namely, that all
learning is an equipotential function of general intelligence, both
arguments are plausible. After all, an average child of six does, by
definition, have twice as much general intelligence as an average child
of three, and an average child of nine has one-third more than an
average child of six. However, the assumption is scientifically
groundless and the two preceding arguments are thus hollow.

It is time to seriously consider the scientific evidence that
the child of three and younger processes sophisticated capabilities highly
relevant to the beginning stages of reading. Furthermore, it is time to
recognize the mounting evidence that some of these capabilities will
regress if they are not activated appropriately. The child of six
has perhaps already lost some of the special capabilities he had at two
and three and therefore must learn to read by utilizing slightly different
mental processes. Quite understandably, we in education tend to find
these concepts concerning complex built-in "cognitive" processes, the
essential interdependence that exists between many built-in factors and
specific environmental input, genetically determined sensitive periods,
learning to read at three by utilizing mental processes that are not
available at six, the utter bankruptcy of the equipotentiality premise
and the urgent relevancy of basic biological principles to education,
somewhat strange and baffling. This is only because we are not yet
familiar with quite common ideas in ethology, linguistics, brain research
and genetics. I have discussed these ideas more fully in a previous
paper (Callaway, 1970).

In summary, four indisputable sets of data confront every
parent and educator of young children. One, nature knows how to expedite
specific kinds of knowledge through the genetic masterplan; two, the
young child is generously endowed with special capabilities in form
perception and language; three, the process of learning to read
requires many of the special capabilities of form perception and
language that the young child is heir to; four, young children of two,

- 24 -

three and four years of age often learn to read very easily. The mere recognition of these four sets of data suggests the likelihood of a certain consequence; namely, that 'four' is a natural sequel to 'one', 'two' and 'three'.

The young child will quickly give the full answer when we give him the opportunity to speak for himself. Yet, however clearly he may speak, he will not be heard accurately if it is presupposed that everything he says must be consistent with current theories on learning and child development. Experimental work must proceed in joint concern with an appropriate restructuring of the conceptual framework relative to reading, so that it may become compatible with all pertinent knowledge now available about the human organism.

# REFERENCES

Bower, T.G.R.  The visual world of infants.  Scientific American, 1966, 215, 80-92.

Callaway, W.R.  Modes of biological adaptation and their role in intellectual development.  PCD Monograph Series, 1970, 1,1. (out of print--write to author for copy)

Chall, J.S.  Learning to Read: The Great Debate.  New York: McGraw-Hill, 1967.

Chomsky, N.  Cartesian Linguistics.  New York: Harper & Row, 1966.

Chomsky, N.  Syntactic Structures.  The Hague: Mounton, 1957.

Cox C.  Genetic Studies of Genius: The Early Mental Traits of Three Hundred Geniuses, Vol. 111, Stanford, California: Stanford University Press, 1926.

De Robertis, E.  Molecular Organization of Synapses for Chemical Transmission in the Central Nervous System.  In A.G. Karczmar & J.C. Eccles (Eds.), Brain and Human Behavior.  New York: Springer-Verlag, 1972.

Emlen, S.T.  Celestial rotation: its importance in the development of migratory orientation.  Science, 1970.  170, 1198-1201.

Frantz, R.L. & Nevis, S.  Pattern preferences and perceptual-cognitive development in early infancy.  Merrill-Palmer Quarterly, 1967, 13, 1, 77-108.

Frantz, R.L.  Visual perception from birth as shown by pattern selectivity. In H.E. Whipple (Ed.), Annals of the New York Academy of Science, 1965, 118, 793-814.

Ganz, L.  An Analysis of Generalization Behavior in the Stimulus-Deprived Organization.  In G. Newton & S. Levine (Eds.), Early Experience and Behavior.  Springfield, Illinois: Charles C.Thomas,1968.

Goertzel, V. & Goertzel, M.  Cradles of Eminence. Boston: Little,Brown, 1962.

Goldman-Eisler, F.  Discussion and further comments.  In E.H. Lenneberg (Ed.), New Directions in the Study of Language.  Cambridge, Massachusetts: M.I.T. Press, 1964.

Lenneberg, E.H.  Biological Foundations of Language.  New York: John Wiley, 1967.

Loehlin, J.C.  Regulatory Functions in Computer Models.  In D.N.Walcher & D.L. Peters (Eds.).  The Development of Self-Regulatory Mechanisms.  New York: Academic Press, 1971.

Lorenz, K. Innate Bases of Learning.   In K.H. Pribram (Ed.), <u>On the Biology</u>
        <u>of Learning</u>.   New York:  Harcourt, Brace & World, 1969.

McNeill, D.   Developmental Psycholinguistics.   In F. Smith & G.A. Miller
        (Eds.), <u>The Genesis of Language</u>.   Cambridge, Massachusetts:
        M.I.T. Press, 1966.

Sauer,E.G. Celestial navigation by birds.   <u>Scientific American.</u>
        1958, 199, 2, 42-47.

Seligman, M.E. & Hager, J.L.   <u>Biological Boundaries of Learning</u>.   New York:
        Appleton-Century-Crofts, 1972.

Von Senden, M.   <u>Space and Sight</u>.   Trans. by P. Heath.   New York:
        Glencoe Free Press, 1960.

Watson, J.D.   <u>Molecular Biology of the Gene</u>, 2nd Ed. New York:  W.A.Benjamin,
        1970.

# PYGMALION IN THE READING CIRCLE

Carl Braun,
University of Manitoba.

Like fashions in clothing, like politics, indeed, like many concerns in education, interest in the "self-fulfilling prophecy" phenomenon has "gone full circle". The first poignant arc of the circle was inscribed by Rosenthal and Jacobson (1968) when they announced to the educational world their findings that pupils mirror teachers' expectations in their school performance. The authors had submitted to elementary teachers a list of randomly selected "academic bloomers" who were given an unfamiliar standard intelligence test ostensibly to norm the test. According to the researchers this externally imposed information created expectancies in teacher's minds. In turn, the teachers' communication of these expectancies was reflected in significantly greater intellectual gains in "bloomers" than in other children.

Publication of the Rosenthal study met immediately with a flurry of enthusiasm--enthusiasm of practitioners to generalize and apply unquestioningly findings of the study, paralleled only by the enthusiasm of the research community to berate the study as overinterpreted, methodologically fallacious, and inadequate with respect to isolating teacher behaviors which produce differential results in children perceived as bright or dull (Snow, 1969; Elashoff and Snow, 1971; Thorndike, 1968). Further, numerous researchers attempted to replicate the salient finding that teachers' knowledge of pupil ability affects pupil treatment and ultimately, pupil achievement (Barber et al, 1969; Claiborn, 1969; Jose and Cody, 1971; Flemming and Anttonen, 1971; Rubovits and Maehr, 1971).

Early consistent failure of replications to produce the "Pygmalion effect" quickly lent support to the methodological objections raised in the Rosenthal study. Thus, the enthusiastic support of the Pygmalion notion was dampened at least temporarily.

Perhaps as a result of the intuitive appeal of the hypothesis as well as non-parallel, if not questionable procedures, in some of the replication studies, the educationally induced Pygmalion has survived one of the most controversial debates in educational literature. Indeed, to date 242 studies have been conducted employing as subjects young children, adolescents, adults, as well as animals (Rosenthal, 1973). The range of cues examined with respect to expectancy potency has spanned the gamut from sex of the subject to (Palardy, 1969) "unusual names" of children (Harari, 1973). The fact that 84 of these (far beyond the chance level of significance) have been successful in producing a phenomenon so experimentally elusive, has given rise to a renewed interest, not only in continued research to debate whether or not the "effect" exists, but rather, in research that examines its pervasiveness, under what circumstances it operates, and the educational consequences with respect to development of self-concept and implications for academic achievement.

Whether or not the clouds of controversy have totally settled, it behooves the practitioner to consider, if only cautiously, the findings of research. The purpose of this paper is to extrapolate from these findings implications for the teacher of reading. The format features illustrative classroom episodes from which generalizations will be drawn.

## Classroom Episode 1

Robert, an eight-year-old boy, has experienced repeated failure as a reader. Miss Optimeir, his second-grade teacher, recognized early in September that, not only was Robert not learning, but he had already given up trying. One day, while the rest of the class was busy at their independent learning activities, Miss Optimeir discovered that Robert had drawn a picture of someone riding a horse. Robert discussed the picture reluctantly with his teacher. A flicker of light appeared on the horizon when Robert found that Miss Optimeir was not only interested, but very pleased with his production. She took her felt marker and proceeded to record a few of the ideas Robert had expressed about his picture. When the teacher asked Robert to read, his automatic response was, "I can't read." His teacher's equally spontaneous reply was, "You know, Robert,

if you can't, you and I can read together."   While Miss Optimeir swept
her finger under the lines she and Robert read his ideas together, first
somewhat slowly and perhaps falteringly, but by the third time, the
teacher's voice faded away and Robert "read" his own ideas in print.
Miss Optimeir's well-chosen and enthusiastic reaction was, "Robert, I
was so sure you could read.   Take this home and read your story to
your dad and mom;   I know they would love to hear it."

Later that day, Robert, in the white heat of what appeared like a
totally new status, decided to try his role, this time with unusual
daring for one whose self-image has already reflected considerable
negativism.   He drew another picture, this time featuring the young
author on a motorcycle.   With considerable apprehension he picked up
a crayon, wrote his name and asked Miss Optimeir how to write "is".
Miss Optimeir, overwhelmed by the sudden "blossoming" of the young
learner, asked him to find the word in the story they had read together
that morning.  · Before Robert had finished "is" he literally "yelped"
I can also use "riding" in this story.

Robert, whose low status as a social being in the room was parallelled
only by his low self-esteem, heard one of his young peers say, "I didn't
know Robert knew how to do school work."

Robert's case cannot be dismissed without mention of the role of
self-image in learning.   There is no dearth of studies identifying
strong relationships between expectation measures in the form of
self-concept and academic achievement (Shaw, Edison & Bell, 1960;   Brookover,
Patterson and Thomas, 1962;   Davidson & Lang, 1960;   Homze, 1962).
Torschen (1969), in summarizing studies of relationship between self-
concept and school achievement reported consistently high correlations.
Bloom (1971) makes the claim that a low academic self-concept increases
the probability of a generally negative self-concept and that successful
school experiences increase the probability of a generalized positive
self-image.

Glock (1972) points the difficulty in changing a negative self-concept. In Robert's case it is likely much easier since he is only eight years old, than it will be for an older child whose negative self-image already has become its own "defender." We need to recognize the stark reality of the fact that a person's self-concept imposes "boundaries" or limits on his actions. . We know that if Robert had never tried, he never would have learned.

## Classroom Episode 2

Miss Busybody is proud to announce, to her colleagues after the second week of school that she finished organizing her reading groups for the year. She has decided to give the bright group, the "Hot Dogs", an enriched programme this year which will include wide opportunity for free reading in the library, newpaper reading and individual conferencing with the teacher. Her second group, the "Jumping Jacks", she announces, will do a traditional skills programme with a heavy dose of word identification teaching. She feels that perhaps by February their skills might develop to the point where they're independent enough to "handle" a more "individualized approach." The "Mud Turtles", Miss Busybody's low group, the "held-over collection" from last year, will begin the year by reviewing their "Fun with Grandmother and Baby" reader. Miss Busybody is so busy with the "Hot Dogs" organizing a programme that gives her and the group considerable publicity, that she is unable to spend much time with the "Jumping Jacks" and "Mud Turtles". Further, since the "Mud Turtles" are a little more mature physically than the other children, they are seated at a table in the rear of the room. Miss Busybody has invited the superintendent and principal to come and observe the "Hot Dogs" in action, as she feels that a few of them are already demonstrating model learning habits and skills.

Miss Busybody's classroom affords a classic example of how a complex of teacher-personal and organizational variables frequently interact to fulfill expectations.

Assignment to special classes or status or non-status learning groups communicates considerable expectancy information to the learner.

McGinley (1970) found that low reading group children are seldom selected as sociometric choices by their peers; even some teachers, in their study, expressed negative feelings toward these children. Apart from the sociometric implications, the effect on the child's image as a learner are obvious. Further, the amount of teacher input and opportunities to respond (Output Factor, Rosenthal, 1973) and opportunities for positive feedback appear to be reduced for these children (Rist, 1970).

The case in point, while perhaps extreme, calls attention to a number of related factors. The fact that readers who are labelled "low" know that they are socially unacceptable (Stevens, 1971) is one. Further, the fact that there is an "inertia function" operative, locking students in, is another. So, knowing that the "Mud Turtles" are probably receiving less than their share of input, and less than their share of opportunity for output, less praise and encouragement, and less peer acceptance than the other children, is dismal enough. The probability that this situation will not change for them is criminal. Pidgeon (1970) in a discussion on expectation implications of high and low ability groups, draws special attention to the distorted and unfair expectations for children from disadvantaged homes, particularly those for whom the initial measure of "potential" may well be itself an underestimate.

## Classroom Episode 3

Tom has just stumbled over the final word in his oral reading. Miss Tirady, his teacher, sighs deeply, "Well, Tom, I'm sure you're as happy as I am that this is over again till tomorrow." Obviously, the session has not gone well. Miss Tirady insists that Tom "figure out" every word rather than to be told. As a result there are frequent long, dead silences disturbed only by the teacher's sighs and foot-tapping and the odd snicker from his peers. Even when the teacher asks Tom questions, Tom is cued by the tone of the question that won't be able to answer; she directs the question to one of the brighter children.

What are some of the implications of this unhappy, yet common, episode? Certainly, Tom is the centre of a veritable maze of cues that signal to him his status. It takes less than verbal cues to accomplish this. Miss Tirady, like most of us, has a fair repertoire of non-verbal signals. Tom knows what she thinks of him and the probability is great

that Tom thinks little more of himself.

Rosenthal (1973) refers to the "expectant voices" of teachers that can be fulfilled by the child's answer. Miss Busybody's "expectant tone" though non-verbal, will certainly be fulfilled.

A further implication arises out of the "Expectant voice" as it affects Tom's self-expectation. The child is literally bombarded with signals that set this expectation; peers, parents, and siblings as well as teachers make their contribution. The degree to which the child will react to the various environmental stimuli in terms of his self-expectation set depends on his self-esteem (Finn, 1972).

Miss Tirady falls into a predictable trap. She can't wait for Tom to think of an answer. She adds to his embarrassment by having one of the "brighter" children "show him up". Rosenthal reports that eleven out of twelve studies support the notion that teachers encourage greater responsiveness of students from whom they expect more. They call on such students more often, ask them harder questions, give them more time to answer, and prompt them toward the correct answer.

Classroom Episode 4

Miss Symcot, the new second grade teacher, is most sympathetic with low-powered children. In her attempt not to pressure her low-achieving pupils, she gives them activities which they can do easily and with complete success. Miss Symcot knows that low level recall questions are easy for these children so she restricts all her questions to this type. She is convinced that this success-oriented programme will ensure development of positive self-concepts in her pupils. Even the few times these children get the opportunity to read materials other than their reading lesson books, Miss Symcot introduces every word which has not appeared in the reader glossary. Further, she has the easy, independent reading books for these children clearly marked on the shelves.

Miss Symcot, though apparently having her "heart in the right place", obviously needs to adjust her head. She guarantees that her expectation will be fulfilled.

Children need to expect of themselves early the ability to become independent readers. If they get no experience coping with the occasional unknown word by themselves they will remain dependent forever. By the same token, if they don't feel responsible for words not covered with them by the teacher, dependence rather than independence is fostered. Good and Brophy (1973) point at the fallacy of teachers who attempt to develop the child's self-image by affording him easy and enjoyable activities without providing him with appropriate instruction and materials.

While Miss Symcot attempts to provide the climate for effective learning to take place, this preoccupation has "blinkered" her from considering the important teacher input-pupil output dimensions.

Classroom Episode 5

Mr. Gullistan, a sixth grade teacher, has in his classroom Elmer, the second child from the Starr family. He remembers Elmer's older brother who spent more time in the principal's office than in the classroom. Mr. Gullistan determines to "put the screws" on Elmer right from the start. He is in no mood for a "repeat performance" of the older sibling's behavior. Mr. Gullistan also remembers having overheard an older teacher's comment about the oldest Starr daughter who had a history of failing grades from her earliest schooling. This seems entirely credible to Mr. Gulliston because Elmer's work right from the beginning has been so poor that he doesn't even bother calling on the boy for answers. Further, to make sure that he won't become uncontrollable, the teacher places Elmer at a desk somewhat removed from the other children. Elmer's first major offense is throwing a wad of bubble gum across the room to attract the attention of one of his friends.

Among other comments to the principal, Mr. Gullistan exclaims, "Why anyone should be forced to carry an ugly handle like 'Elmer' eludes me to start with."

Elmer's problem is complicated by an unfortunate set of circumstances
- wrong family, wrong name and now wrong teacher. Mr. Gullistan expects
Elmer to be a problem and hastens to treat him as one. Separation from
his peers virtually forces Elmer into misbehavior, and thus Mr. Gullistan's
expectations are quickly fulfilled.

Elmer's case confronts us with the sobering thought that all that is
said in faculty lounges is not necessarily the whole truth and further,
that generalizations from these statements are too often carried to
extremes. However, we know that this information, as well as that from
cumulative files, contributes to the teacher's expectation of the learner.

While it may seem incredible that Elmer should "bear the brunt"
of his sibling's demeanor and low achievement, at least one study (Seaver,
1971) has borne out the fact that younger siblings of good students obtain
higher achievement scores if they are assigned to older siblings' former
teachers than if assigned to other teachers.

While evidence is limited, at least one study, Harari (1973),
suggests that names of children influence teacher attitudes toward them.
The author found that unusual names are branded as "losers' names" by
experienced elementary teachers.

## Classroom Episode 6

The principal has decided to move George, a low-achieving fifth
grader to Miss Gin's room. Miss Gin has "learned to live" with her
collection of "flunkies" and does a remarkable job babysitting. While
George finds his way to his seat, the principal assures Miss Gin that
George is just another "blank cheque" for her collection, one from whom
"we won't expect academic miracles." He implicitly reinforces Miss
Gin's assessme of her class by saying, "All we can do for these
children is to see that they get sunlight, water and air."

George's situation offers a logical sequel to Elmer's episode. Both
illustrate aptly some of the sources of cues on which teachers base their
expectations of individual children. The source in George's case is the

- 35 -

41

principal. Unless Miss Gin takes the principal's assessment as a
challenge to try to "turn George on", there is good reason for her to
take solace in the assessment. The point made earlier in the paper
regarding the relationship between fulfilled teacher expectations and
amount of teacher input might well apply here.

## Classroom Episode 7

Miss Jackson has been asked by the Home and School Committee to
demonstrate the radio reading concept with twelve of her third graders.
Miss Jackson picked twelve girls for the demonstration for two reasons.
First, she is convinced that they are better readers than the boys in the
room. Second, she knows that the girls will be easier to "manage" than
the boys. Miss Jackson has read many research reports indicating girls'
superiority over boys in reading achievement and certainly knows that
with very few exceptions this is the case in her c  room.

One does not have to look far to find studies testifying to girls'
superiority over boys in reading achievement. Nor does one have to go
far to find a greater diversity of behaviors exhibited by primary boys
than by girls. Certainly, Miss Jackson contributes her share to the
perpetuation of these generalizations.

There is ample evidence in the literature that the sex of the learner
generates differential cues to teachers, cues which, in turn, result in
differential expectation and treatment of boys and girls. Palardy (1969)
in investigating the effects of teachers' beliefs on pupils' achievement,
concluded that if teachers believe that first-grade boys will do as well
in reading as girls, this will, in fact, happen. The converse was
equally true. Part of the answer, again, may lie in the input-output
factors offered by Rosenthal. Meyer and Thompson's study (1956) offers
a further clue. Sixth-grade children were asked to nominate which of
their classmates received teacher approval and disapproval. In addition,
classroom pupil-teacher interaction was analyzed with respect to
"approval" and "disapproval" contacts. Both techniques yielded the
same results--teachers expressed greater approval for girls than for
boys, a finding corroborated by Davidson and Lang (1960).

Classroom Episode 8

Mrs. Smith attempts to placate her daughter Janet's frustration as she faces her daily quota of homework. Throwing her book in disgust, Janet announces, "If I am ever assigned another book report, I'll set fire to the school." Her mother, in an attempt to comfort her daughter assures her that she has never enjoyed reading and received a D on every book report she ever wrote. Mrs. Smith, at a subsequent parent-teachers' conference, pleads with the teacher to "go easy" on Janet and hastens to inform him of her own inability and interest in reading and report-writing.

Janet's case offers another example of a situation in which a teacher can be absolved from the responsibility of maximum teacher input. It demonstrates further, the parent's attempt to relieve herself of some of the guilt so typically involved when an offspring's achievement is lower than desirable.

The example is included to demonstrate that individuals out of school, as well as in, influence both the teachers' expectations of pupils and the learner's self-expectation. Psychologists have been particularly concerned with the dynamics of parental expectations with respect to certain neuroses that are promoted by the expectations (Aldrick, 1971; Szurek, Johnson and Falstein, 1942).

It is quite conceivable that Janet's self-expectation, certainly, with respect to reading is low. Her mother has certainly made her contribution to the fulfillment of the expectation. Add to this the probability of decreased teacher input and decreased learner output and fulfillment of the expectation is all but guaranteed.

Discussion

The episodes cited indicate clearly the complex interaction of dynamics occurring before an expectation is fulfilled. However, even the episodes are over-generalized for the sake of emphasis on specific points. There certainly is no reason to believe that expectations are automatically self-fulfilling. In order for the fulfillment to occur, the expectation first has to be translated into behavior that communicates these expectations to the learner and then shapes the behavior toward expected patterns. There are reasons why this does not always happen.

For example, a teacher need not necessarily have clear-cut expectations about a student-- or his expectations may change from time to time. Even when his expectations are consistent he may not communicate them through behavior consistent enough for the cues to register significantly with the learner. Further, the learner himself might resist the teacher's expectation in a way that could change them. Simply, a teacher's expectation "requires more than its own mere existence in order to become self-fulfilling (Good and Brophy, 1973, p.75)".

Good and Brophy outline a logical sequence of steps to illustrate how the process most likely operates:

1. The teacher expects specific behavior and achievement from particular students;

2. Because of these different expectations, the teacher behaves differently toward the different students;

3. This teacher treatment tells each student what behavior and treatment the teacher expects from him and affects his self-concept, achievement motivation, and level of aspiration;

4. If this teacher treatment is consistent over time, and if the student does not actively resist or change it in some way, it will tend to shape his achievement and behavior. High-expectation students will be led to achieve at high levels, while the achievement of low-expectation students will decline;

5. With time, the student's achievement and behavior will conform more and more closely to that originally expected of him. (p. 75).

Howe (1972) offers a specific example to parallel Good and Brophy's steps:

"...a teacher in a ghetto school who is told that the children in his class are likely to be disruptive may react by using a 'firm' approach, giving more punishment than encouragement and praise. Partly as a result of this strategy, the children may behave badly, strengthening the teacher's belief in the necessity of the negative methods of control. Hence, a vicious cycle results in which the teacher, on the basis of his expectancies, acts in ways which lead to those expectancies being fulfilled (p.253).

Finn (1972) adds a point of clarification to the literature on expectation. He suggests that an expectation set denotes anticipation and that it is this anticipation which shapes the manifestation of expectation. He points out, further, that it is this anticipation that distinguishes expectations from "hopes, desires, as well as from aspirations (p.390)". For example, I may "expect" my class to be settled Friday afternoon. My actions and my manner, however, strongly signal that I anticipate the usual rowdiness. The former use of "expect" conveys a hope or aspiration, the latter my estimate of reality, and dictates my actions toward the class.

Finally, this paper, like others on the subject, may leave the general impression that "expectation is a bad thing, or at best, that expectations should always be high. Neither is the case. Nobody can avoid forming an expectation set. It is important, however, that we are aware of the fact that such a set is inevitable and, further, that we see the need to keep expectancies open and tentative. This should aid in preventing distorted perceptions and behavior which commonly ensue from a closed "set". Certainly, unduly high expectations represent a distortion of reality and may place undue pressure on the learner, subtle though these pressures may be.

# REFERENCES

Aldrich, C.K., "Thief", Psychology Today, Volume 4 (10), 1971, 66-69.

Barber, T.X.; Forgione, A; Chaves, J.F.; Calverey, D.S., McPeske, J.D., and Bowen, B., "Five Attempts to Replicate the Experimenter Bias Effect", Journal of Consulting and Clinical Psychology, 1969, 33, 1-6.

Beez, W.V., "Influence of Biased Psychological Reports on Teacher Behavior and Pupil Performance". Proceedings of the 76th Annual Convention of the American Psychological Association, Volume 3, 1968, 605-606.

Bloom, B.S., in James Block (ed), Mastery Learning, Holt, Rinehart and Winston, Inc., 1971.

Brookover, W.B., A. Paterson and S. Thomas, Self-Concepts of Ability and School Achievement, East Lansing: Office of Research and Publications, 1962.

Claiborn, W.L., "Expectancy Effects in the Classroom: A Failure to Replicate", Journal of Educational Psychology, 60, 1969, 377-383

Dsvidson, H.H. and Lang, C., "Children's perceptions of their teachers' feelings towards them related to self-perception, school achievement, and behavior." Journal of Experimental Education, 29(2), 107-118, 1960.

Elashoff, Janet Dixon, and Snow, Richard E., Pygmalion Reconsidered: A Case Study in Statistical Inference: Reconsideration of the Rosenthal-Jacobson Data on Teacher Expectancy, Wadsworth Publishing Company, 1971.

Finn, Jeremy D., "Expectations and the Educational Environment", Review of Educational Research, Volume 42, Number 3, Summer, 1972, pp. 387-410.

Fleming, Elyse S. and Ralph G. Anttonnen, "Teacher Expectancy on My Fair Lady", Paper presented at American Educational Research Association Meeting, March, 1970, Minneapolis, Minnesota.

Glock, Marvin D., "Is There a Pygmalion in the Classroom?", The Reading Teacher, 25, 1972, 405-408.

Good, Thomas L. and Jere E. Brophy, Looking in Classrooms, Harper and Row Publishers, 1973.

Harari, Herbert, "Specialist: Name Can Hinder Child" The Minneapolis Star, June 2, 1973, p.1.

Homze, Alma Cross, "Reading and the Self-Concept", Elementary English, 39, 1962, 210-217

Howe, Michael J.A., Understanding School Learning, Harper & Row Publishers, 1972.

Jose, J. and J.J. Cody, "Teacher-pupil Interaction as it Relates to
Attempted Changes in Teacher Expectancy of Academic Ability
and Achievement", American Educational Research Journal,
Volume 8, 1971, 39-50.

McGinley, Pat, and Hugh McGinley, "Reading Groups as Psychological Groups",
Journal of Experimental Education, 39, 36-42, Winter, 1970.

Meyer, W.J., and G.G. Thompson, "Sex Differences in the Distribution of
Teacher Approval and Disapproval Among Sixth-Grade Children",
Journal of Educational Psychology, 47, 1956, 285-296.

Palardy, J. Michael, "What teachers believe - what children achieve".
Elementary School Journal, 69, 370-374, April, 1969.

Pidgeon, Douglas A., Expectation and Pupil Performance, NFER Publication, 1970.

Rist, Ray C., "Student Social Class and Teacher Expectations: The
Self-Fulfilling Prophecy in Ghetto Education", Harvard
Educational Review, 40, 1970.

Rosenthal, R., and Lenore Jacobson, Pygmalion in the Classroom, Holt,
Rinehart & Winston, 1968.

Rosenthal, Robert, "The Pygmalion Effect Lives", Psychology Today,
September, 1973, pp. 56-62.

Rubovits, P.C., and M.L. Maehr, "Pygmalion Analyzed: Toward an
Explanation of the Rosenthal-Jacobson Findings", Paper read
at the American Educational Research Association Conference,
New York, 1971.

Seaver, W.B. Effects of Naturally-induced Teacher Expectancies on the
Academic Performance of Pupils in Primary Grades", unpublished
doctoral dissertation, University of Illinois, 1971.

Shaw, M.C., K. Edison, and H.M. Bell, "The Self-Concept of Bright Under-
achieving High School Students as Revealed by an Adjective
Check List", Personnel and Guidance Journal, Volume 39, 1960,
193-196.

Snow, Richard E., "Unfinished Pygmalion", Contemporary Psychology,
Volume 14, Number 4, April, 1969, 197-199.

Stevens, Dean O., "Reading Difficulty and Classroom Acceptance", The
Reading Teacher, 25,       , October, 1971.

Szurek, S., A. Johnson and E. Falstein, "Collaborative Psychiatric
Therapy of Parent-Child Problems", American Journal of
Orthopsychiatry, Volume 12, 1942, 511-516.

Thorndike, R.L., "Review of R. Rosenthal and L. Jacobson, Pygmalion in
the Classrcom", American Educational Research Journal, 1968,
5, 708-711.

Torschen, Kays, in James Block (ed) Mastery Learning, Holt, Rinehart and
Winston, 1971.

# DEALING WITH FEELINGS AND EMOTIONS IN THE CLASSROOM

Margaret A. McHugh

University of Victoria

Learning to read has usually been viewed as a skill-acquisition, cognitive task. Can dealing with feelings and emotions in the classroom effectively contribute to its accomplishment? A brief examination of the reading experience may identify several possibilities.

## THE TRADITIONAL FIRST "R"

The essential goals in teaching reading are to develop the basic reading skills, and related cognitive learning to a level of minimum mastery. The overall goal in reading is not limited to word recognition, but includes comprehension and development of personal meaning. This seems to be accompanied by an optimistic assumption that the acquisition of adequate skills will lead the student into becoming a life long "reader". That students will acquire enough of these basic skills to be able to cope with life in a technological society is often a conspicuous hope.

Failure to achieve these goals is documented all too often. It is uncomfortably clear that far too many students do not have sufficient mastery of the basic skills, and the proportion of the adult population who are "readers" is discouragingly small.

What happens in the classroom? The technical skills are often acquired through a "need to achieve". Those without the "need to achieve" find they are seldom given a chance to succeed, and they quickly learn that they don't succeed! A mechanical cognitive approach can leave the student strangely uninvolved in reading. The feeling, emotional, imaginative, awareness side of the students has either been left to chance or neglected.

## NEGLECT OF FEELINGS

We know that feelings, however disguised, accompany all that we do. Feelings/emotions are often looked on as necessary evils which should be somehow ignored -- swept under the rug. Many teachers as well as children have learned to ignore, suppress, distort and control their own feeling-experiences. Unfortunately their denial in no way mitigates their effect. When a student has never learned appropriate ways of dealing with his feelings he may react inappropriately. Such feelings may emerge in the form of unspoken antagonisms and anti-pathies, distrust, hidden agendas, dissatisfaction, tension, verbal fencing and so on. Every interaction becomes a battle of wits or a potential threat. Teachers who have been conditioned to avoid feelings have difficulty facing and dealing with feelings in the classroom. The outcome has been a classroom devoid of feelings and emotions. There is a growing recognition throughout North America that some important aspects of learning have been overlooked. When an almost purely intellectual learning in the classroom is fostered, the affective capacity of the students is stunted. Yet, intellect divorced of feeling is empty and meaningless. The student develops, but loses the awareness

of himself as a unique, feeling person. Isolating cognitive learning

from affective learning fragments the person and decreases involvement

in learning. As this occurs as part of the classroom experience, there

is a growing recognition of and concern about the effect that disregard

for feelings has upon the learning process.

## Interfering With Learning

Many problems in the classroom, including learning problems,

stem from the fact that parents and teachers deny feelings and are

therefore unable to integrate them with the intellectual content of the

classroom. They have probably never recognized that this is one aspect

of being human which leads to genuine involvement in the learning

enterprise. The loss is enormous. Any approach to reading instruction

which focuses primarily on cognitive skill development while ignoring

the affective components of learning, can only be marginally successful

in producing competent "readers". We lose the means of dealing directly

with the formation of attitudes and the shift in values. Furthermore,

most of us have gotten locked into feelings from which we cannot free

ourselves. These feelings arise in all we attempt to do and they

interfere with our learning, and learning to enjoy learning.

## Producing Half-men

Without feelings and emotions, learning to function effectively on

an intellectual level becomes limiting. By ignoring feelings and

emotions, we deny an important potential in each student. When the only

acceptable answers are the "intellectual" ones, curiosity and sensuality

are repressed. Furthermore, when spontanaeity is viewed as impulsivity,

and emotion and feeling are regarded as beneath the dignity of educated man, the possibilities for the healthy development of the individual are by-passed.

## Contributing to Existing Emotional Problems

We have found in psychotherapy that denial and suppression of feeling/emotional states truncates the individual, and frequently initiates or leads to emotional problems which eventually must be dealt with in our society by professional and/or institutional care. When the classroom perpetuates a process which had its beginnings elsewhere, it increases the distress being experienced by the individual and misses the opportunity of providing an environment in which healthy personal development and increased learning can occur.

## FEELINGS AND EMOTIONS AS POTENTIAL

Another view can be taken of feelings and emotions. Rather than being seen as problems and liabilities, they can be viewed as assets which will allow the individual (both student and teacher) to be more active and alive, and the classroom to be a meaningful place to live and learn.

## A Healthy Environment Developing Whole People

Recognizing and taking into account one's total experience is an attempt to bring therapeutic principles into focus. A classroom which fosters individual self-expression enables a learner to view himself in a more positive light and to develop feelings of personal competence and

self worth. By exploring feelings in the classroom, the individual is able to develop and clarify his own understandings. This leads to educational practices which enlarge the choices and possibilities open to learners and the alternatives they have to express their potentialities. By establishing a therapeutic environment in the classroom, many emotional, and learning, problems may be avoided. Maslow (1970) has suggested a critical difference between an individual who seemingly struggles with life, and what he terms the "self-actualized" person. The first is coping with life experiences whereas the second is expressive about his experiences. They each experience life in vastly different ways. The first is apt to be limited to an intellect, cognitive approach to his life. The second will include in his experience the full range of feeling and emotional components and express these in ways appropriate to the circumstances.

## Increasing Learning

-. Effective education must involve the entire person and encourage him to actively enter into the process. When the whole person is included in the process, learning is apt to be more enjoyable. When activities allow for and provide affective experiences, cognitive learning can be increased and enhanced. Enjoyment arises out of activities highly charged with feelings and emotions. When feelings and emotions are "admissable", a therapeutic process may evolve in which the joy of discovery and learning will replace the former dread and hate of reading. There is little doubt that reading provides a rich setting for making learning a living process. Feelings predominant in a students' life

will surface both in response to the reading experience itself and to the content of the reading material. One of the most unused components of effective teaching may be feelings; - the teacher's feelings and his own awareness of them and the pupil's feelings and the respect given them. A teacher who is tuned-in to his own and his pupil's feelings is less likely to find learning in his classroom a bore.

## INTEGRATING FEELING AND EMOTIONS IN THE CLASSROOM .

To insist that feelings should be put aside in the classroom is to ignore the direct correspondence between emotional well-being, and social and intellectual success. In advocating an integration of the intellectual-cognitive dimensions of learning with the feelings occurring in the classroom, it is being proposed that an environment can be created to promote the development of the whole person, and at the same time increase the quantity and quality of the learning.

The position which suggests combining cognitive with affective education is based on a recognition of both the student's emotional concerns and the process involved in learning. This is a process-approach which attempts to relate the private world of the student's experience to public knowledge of subject matter. It is designed to move students beyond the "turn on" stage of initial enthusiasm to a point where they can learn the logical and psychological processes necessary for controlling their own intellectual growth.

When the Affective Domain (Krathwohl, Bloom, and Masia, 1956) was published, there was widespread acknowledgement of the issues but

little practical application. Understanding and agreeing with the words on a cognitive level came easy to many of us schooled on the cognitive level, but it seems we found ourselves very ineffective in recognizing how we could include feelings and emotions in our classrooms. Since then, much has been learned about the role of feelings and emotion in individual learning. How can teachers incorporate these important affective dimensions of learning into their instructional procedures?

## Teaching Occurs in a Relationship

Ninety-five percent of teaching involves _relationships_ with people, yet few teachers have had much help in learning how relationships are formed. Most of their preparation time has focused on subject matter, teaching methods and broad theories of learning. Perhaps it has been assumed that teachers just naturally know how to form relationships with people. However, we know that most people growing up in our culture have not been encouraged to recognize or express their emotional and feeling states and we also know that it is shared feelings that are the bond through which relationships develop. There is a powerful implication here regarding the "person" of the teacher in the teaching relationship.

## The "Person" of the Teacher

Recent research (Combs, _et. al._ 1969) on effective teaching identified a number of related characteristics which are of interest. They found effective teachers could be characterized as being willing and able to form relationships. They also found that effective teachers were self-revealing rather than self-concealing and could treat their

feelings and shortcomings as important and significant rather than hiding or covering them up. Such teachers were willing to disclose their "self" and were comfortable being themselves. As a group they expressed concern for their current thinking, feelings, beliefs and understandings. Finally, effective teachers tended to view other people as being worthy, capable, friendly, internally motivated, dependable and helpful.

Attitudinal qualities which were first discovered in psychotherapy appear to exist in the relationship between the teacher and the learner. The first of these attitudes can 'e termed Acceptance. This means respect for the individual being and a recognition of each individual's uniqueness. Teachers who accept others as whole beings, each with distinctive feelings, appear to have attitudinal qualities which contribute to their effectiveness in the classroom. In order to cause children to experience satisfaction and pleasure in reading, the first step is for the teacher to prize the reader -- not the reading. It implies a trust that he can be himself. The second attitude is Sincerity. This means genuineness. This implies the teacher has a reasonable degree of self-awareness which allows him to be in touch with his own feeling/emotion states so he can avoid conveying messages to his students which are confusing or contradictory. The third attitude is Understanding. Here the teacher tries to understand the experience of the student from his (i.e. the student's) point of view. It involves an attempt to understand both the content and the emotional components of the learner's experience.

Each of these attitudes is based upon the teacher's recognition, acknowledgement, and acceptance of his own feelings, and the feelings of others. By dealing with the student in terms of what he is experiencing at the present moment, he can be encouraged to become aware of himself, his own growth and learning process. He can then begin to assume responsibility for its direction. This moves us out of the focus on "repair and treatment" to a process of prevention, health and growth. There is no suggestion here that teachers should practice therapy in the classroom. The teacher who has learned to feel, and hence to use his feelings in his teaching, has at his disposal many of the attributes helpful in giving "success experiences" to others.

When a teacher knows and understands himself and his pupils, he is better able to deal directly with those student behaviors he does not like. He is less likely to cut off everything that is human about the child or teach in a way which fosters only mechanical responses in learners. On the contrary, he is more likely to design a learning environment which stimulates pupil involvement in learning.

GUIDELINES FOR DEALING WITH FEELINGS AND EMOTIONS IN THE CLASSROOM

The following guidelines are based on four assumptions: (1) that the teacher in the classroom is willing, able and is dealing with his own feelings effectively, (2) that he has learned how to establish relationships with students in his class, (3) that he is open to the "here and now" ongoing experiential nature of the classroom and (4) that he recognizes a need to get back in contact with body, feelings and emotions before students can function as whole persons.

## Legitimizing Feelings

The most caring thing a teacher can do is to allow and encourage children to experience the full range of all their emotions -- the more unpleasant as well as the pleasant. This can be facilitated when teachers and children can mutually share a receptivity to feelings which provides the means of involving the whole child in the learning task. This implies a model of learning in which the teacher demonstrates by his own behavior how to integrate himself within a learning situation. This can be done in several ways.

First, the teacher can demonstrate it is more satisfying to be real. This implies owning his own thoughts, feelings, actions as he strives to be aware of his own experience. He is willing to communicate with others in a direct and honest way without the usual facades and masks. For example, let us visualize a classroom which is noisy, rowdy, and chaotic. Let's assume that you, as the teacher, are uncomfortable with this state of affairs. By stating clearly that this experience is extremely unpleasant for you and that you are unable to proceed with the lessons at hand - such a statement does not imply blame. It simply reports your own feeling state.

Second, the teacher can be receptive to the other person. He can listen in a non-evaluative way to the experience of the other person and then reflect to him an accurate understanding of his experience. In order to do this, the teacher must provide a "safe" classroom atmosphere where a student can risk expressing his feelings in an open, honest and direct way.

Third, the teacher can choose some simple techniques to crystalize
and dramatize feelings and attitudes which previously were not
accessible to the individual in question. For example, feelings
can be a legitimate topic for discussion when a current or long-
standing problem in the classroom can be brought out in the open where
they can be dealt with. This allows students to experience new forms
of communication, problem solving and learning.

## Developing Involvement

Feelings are inherent in any content. In order to involve the
student in the content of a course, (e.g. reading) their feelings
about the subject matter must be recognized and accepted. Interest
in a classroom activity develops when a student's capacity to think
arises out of acceptance and understanding as he expresses his feelings,
thoughts, hopes and wishes. This produces a therapeutic atmosphere
in which the student comes to regard the classroom as a healthy place
to be; - a place to develop and learn.

It is suspected that "one's range of experience" expands or
contracts in relation to shifting feelings. If a wider range of
experience is open to a student during joy than during fear, it would
seem that the teacher could extend the student's learning experience by
learning how to effectively deal with a learner's negative feelings.
Such feelings become blocks and barriers to involvement and learning.
For the teacher who desires to bring about changes in behavior, shifts
in feelings and attitudes, produce movement toward self-direction,
commitment and involvement,-developing the skills to deal effectively

with feelings and emotions becomes a challenge and a goal.  This
includes feelings which are generated within the classroom, as well as
feelings which are stimulated by the content of the reading material
itself.

## Imaginative and Creative Ways

There is a wide variety of affective techniques which have been
proposed and developed.  These range from dramatizations which use
psychodrama principles, use of awareness exercises, experiential and
discussion groups, exploration of questions which all relate to the
feeling/emotion components of the reading experience, - to the keeping
of individual journals of the ongoing experiences related to reading
in the classroom.  The accompanying list of references can supply the
reading teacher with many approaches which he may be able to apply to his
own setting in imaginative and creative ways.

### CONCLUSION

Feelings and emotions can be incorporated into the reading
classroom as a means of stimulating  and intensifying the
learning process of students.  Evidence is accumulating which indicates
that when the attitudes of realness (genuineness-sincerity), trust-
acceptance, empathetic understanding are exhibited by a teacher,
learning is facilitated.

Joy permeates the classroom when feelings are dealt with rather
than suppressed and ignored.  Excitement and "realness" are described
when students experience the freedom to be in touch with ongoing
feelings and these feelings can be a part of the entire learning experience.

By focusing on the needs of the child, e.g. the need to be treated with respect and dignity, the need to be listened to, and the need to know that what he says is valid and important, we encourage students to get in touch with their feelings of identity, power, and connectedness.

The therapeutic classroom may be one approach to making education a personal, self-developing, dignifying and humanizing process. Greater satisfaction will grow out of the level of realness, involvement and enthusiasm, which is generated in such a person-oriented setting. It is difficult to predict results because enthusiasm, involvement, appreciation, and the possibilities of becoming a lifetime reader are hard to measure. By extending our own explorations in this integrated view of education, and by assessing our own experience, we may achieve a more gratifying educational experience for students and teachers.

## REFERENCES

Borton, T. and Newberg, N.  Education for Student Concerns,
    Philadelphia Public Schools, 1969.

Borton, T.  Reach, Touch and Teach:  Student Concerns and Process
    Education.  New York:  McGraw-Hill Book Company, Inc., 1970.

Brown, G.I.  Human Teaching for Human Learning.  New York:  McGraw-
    Hill Book Company, Inc., 1970.

Combs, A.W., et. al.  Florida Studies in the Helping Professions.
    University of Florida Social Studies Monograph No. 27, 1969.

Combs, A.W., Avila, D.L., Purkey, W.W., Helping Relationships:  Basic
    Concepts for the Helping Professions.  Boston:  Allyn and Bacon,
    Inc., 1971.

Gendlin, E.T.  Experiencing and the Creation of Meaning.

Gendlin, E.T., Tavris, C.  A Small Still Voice.  Psychology Today,
    June, 1970.

Gillham, H.L.  Helping Children Accept Themselves and Others.  New
    York:  Bureau of Publications, Teachers College, Columbia
    University, 1959.

Ginnott, H.G.  Teacher and Child.  New York:  The Macmillan Company, 1972.

Holt, J.  How Children Learn.  New York:  Pitman, 1967.

Jerisild, A.T.  When Teachers Face Themselves.  New York:  Bureau of
    Publications, Teachers College, Columbia University, 1955.

Jones, R.M.  Fantasy and Feeling in Education.  New York:  New York
    University Press, 1968.

Krathwohl, D.R., Bloom, B.S., and B.B. Masia.  Taxonomy of Educational
    Objectives Handbook II:  Affective Domain.  New York:  David
    McKay Company, Inc., 1956.

Leeper, R.  Humanizing Education:  The Person in the Process.  Washington,
    D.C., Association for Supervision and Curriculum Development,
    N.E.A., 1967.

Lyon, H.C. Jr.  Learning to Feel - Feeling to Learn.  Columbus, Ohio:
    Charles E. Merrill Publishing Company, 1971.

Lyons, J.  Experience:  An Introduction to a Personal Psychology.  New
    York:  Harper & Row Publishers, 1973.

Marshall, B. (ed.)  Experience and Being.  Belmont, California:  Brooks-
     Cole Publishing Company, 1971.

Maslow, A.H.  Motivation and Personality.  New York:  Harper & Row
     Publishers, Second Edition, 1970.

Moustakas, C.  The Authentic Teacher.  Cambridge, Massachusetts:  Howard
     A. Doyle Publishing Company, 1966.

Rogers, C.  Freedom to Learn.  Columbus, Ohio:  Charles E. Merrill
     Publishing Company, 1969.

Weinstein, G. and Fantini, M.  The Disadvantaged.  New York:  Harper &
     Row Publishers, 1968.

Weinstein, G. and Fantini, M.  Making the Urban School Work.  New York:
     Holt, Rinehart, and Winston, 1968.

# NONVERBAL COMMUNICATION IN THE CLASSROOM

R. Vance Peavy

University of Victoria

Introduction. When the topic of nonverbal behavior is brought up with teachers, many will reply with, "Oh, you mean gestures and facial expressions -- yeah, I know all about that." Since all human beings are constantly engaged in nonverbal behavior and most have at least some degree of self awareness, there is a grain of truth in the response. But, truthfully, can we imagine that anyone 'knows all about' nonverbal behavior? Unlikely! Many experienced teachers will have developed some skill in noticing and responding to nonverbal behaviors of students. Very few have much awareness of their own nonverbals. This is not surprising. Ordinarily we get very little feedback on our nonverbals. Other people will comment on what we verbalize but will not comment on what we signal nonverbally. In other words it is very difficult to see one's self in action. Further, almost without exception, no teacher preparation institution, no school, and no single teacher deliberately formulates and teaches a nonverbal curriculum.

Fortunately, there is a growing knowledge of the principles and processes of nonverbal communication and there are increasing attempts to relate this knowledge to classroom contexts. We can briefly note six assumptions about nonverbal communication which have support from studies in psychology, sociology, and anthropology.

Basic reality.[1,2]  Whenever human beings are in contact with one

another, there exists between them a basic reality which is tacitly

understood and shared but not expressed in words.  This nonverbal

reality performs at least two functions:  the expression of feeling

and emotion and the control or regulation of other behaviors-including

speech.  Since teachers and students are in continuous interaction, the

importance of nonverbal communication in the classroom seems incontestable.

Relationship language.[3]  A teacher's attitude toward a pupil can

be inferred from the way in which she looks at him, or avoids looking at

him; in sitting or standing distance between self and pupils; in the

types of movements which the teacher employs toward pupils, and so on.

These and other nonverbal behaviors 'set the stage' for the relationships

which are to obtain between teacher and pupil.  Gaze, body attitudes,

facial expressions and distancing are cues that signal aloofness,

intimacy, concern or indifference.  Thus, we say that these cues are

the unspoken determiners of human relationships.

Nonverbals carry feelings.  Although a teacher may express her

feelings verbally, these may be contradicted or amplified by her actions,

facial expression or posture.  Pupils may be unconvinced by the words

they hear from their teacher because her nonverbals give a more impor-

tant message.  Emotions such as fear, hate, love, anger, and anxiety do

find expression in words; however, the real power of these and similar

emotions is usually conveyed by nonverbal cues such as 'tight lips',

'rigid posture', 'warm smile', 'shaky voice', etc.

Nonverbals qualify.[4] By paying close attention to nonverbal behaviors, a listener is able to determine just _how_ he is to understand what a speaker is saying. For example, a teacher's voice may have a tentative, quavering quality while she asks her pupils to stop talking. The quavering voice may signal the pupils that it is all right to continue talking in spite of the verbal orders of the teacher. Or a teacher who invites a pupil to take a seat at her side while they work together on a problem is signalling that her words can be taken seriously, she is willing to share her attention and private space with the pupil. A very different 'stage' is set by the teacher who directs the pupil to stand while she remains seated. The pupil is directed by the distance and difference in posture to understand that what is transpiring between them is 'official'.

Nonverbal leakage.[5] Another important function of nonverbal behavior is that it 'leaks' information about the true motives, intentions, and messages of the sender. Using speech, most persons have a remarkable capacity to mask or censor their thoughts and express only what will bring them advantage as they understand the situation. Since most persons remain relatively unaware of their own nonverbal behaviors, they are unable to exert control over them and censor nonverbal messages in the same way that they are able to control speech.

Certain nonverbal behaviors are associated with the role of 'teacher' and 'student'.[6] Throughout our culture teachers can be observed in the act of snapping their fingers to get attention, holding finger to lips to achieve silence, folding arms to signal disapproval, and pointing to

give directions. Students learn to 'look' like they are listening, nod head to indicate understanding, and 'appear' busy. Very early in school children begin to learn various hand-raising strategies. Various teacher and pupil nonverbals are used to supplement or take the place of verbal behaviors. It is unwise for teachers to ignore or under-estimate the importance of these nonverbals for they are often powerful regulators of speech meanings and operate to control social processes. Whenever verbal information is in doubt, missing, or misleading, then nonverbal language is critical in determining what happens next.

Interpersonal communication is a two-way, reciprocating process made up of two major ingredients: verbal and nonverbal. In the rest of this paper we will attempt to underline the importance of classroom nonverbal communication and give some indications of how classroom teachers can develop their own nonverbal potentials.

Verbal domination. There is little doubt that the majority of classrooms from kindergarten to graduate school are dominated by 'teacher talk,' and rarely does the proportion of teacher-talk fall below 50% of the total speech flow. In many secondary classrooms this ratio increases to 80% and above. In university classrooms the proportion of teacher talk is frequently over 90% and a 99% domination is not unheard of.

One way to combat the verbal domination of students by teachers -- a condition Ivan Illich has named 'narration sickness' -- is to recognize that human meaning rests on much more than words. Often it is the nonverbal that carries the real message impact and shows the truth (or

lack of it) in what we say.

What we say is certainly important; and how we speak may be even more important. The tone, rate, volume and pitch of our voice, the pauses, and the non-speech signs that accompany our words may say a great deal more, including the truth, than words alone say. When we learn to listen to how a person speaks as well as hearing what he says, we are tuning in to the subtle language of the nonverbal. This is the language of the 'pointing' finger, the 'loving' glance, the 'strutting' walk, the 'furtive' smile, and the 'thoughtful' silence; it is also the 'touch' of the hand, the 'look' of the face, the 'movement' of the body.

Consider the following brief teaching sequence that illustrates the language of nonverbal in action.

The teacher: walked from the desk toward the children; opened a book; looked down at a question in the planbook; placed her left hand on top of the page; looked up at the children; closed the book on finger; raised hand to write on board; wrote 'Describe the cloud formation you see today,'; turned toward the class; looked and pointed to a boy near the window. This sequence was done nonverbally, effectively and with good control.

Movements and expressions are of two kinds. Many of the bodily movements and facial expressions used by teachers fall in one of two classes: instructional or personal. Instructional motions are an integral part of the teaching process and may be performed either consciously or unconsciously. When a teacher points to an

- 61 -

area on a map, she is using an instructional motion. Such a motion communicates essential meanings which are directly related to the teaching task. A skilled teacher has learned that correctly used instructional motions are economical and effective, and put her more 'in touch' with the children's meaning level.

In contrast to deliberate instructional motions, we can observe a teacher scratching her ear, adjusting jewelry or clothing, walking with a stiff gait, folding her arms across her chest, or rising from a chair in a graceful, centered movement. These motions are personal and not deliberately used by a teacher to supplement instructional speech.

Personal motions are signs of what one consciously or subconsciously has learned as important self-presenting gestures; they indicate efforts to gain balance, reduce tension and achieve bodily comfort; and they may indicate such inner states as preoccupations, tension, headaches, and so on.

Informal research suggests that about 25% of teacher motions can be classed as personal and about 75% as instructional. Ironically, it is often the personal motions that carry the most powerful messages in classroom interaction just as in other aspects of daily living.

Actions and feelings are inseparable. The impact of our actions is especially significant with regard to feelings, since action is inseparable from the feelings we either knowingly or unwittingly express in our daily interactions. It is just these feelings that determine the effectiveness of our actual relationships on the intimate, social

and working levels.

With feelings, others will often rely, more on what we do -- that
is, rely on our gestures, posture, movements, and what we say. This is
especially true when feelings are masked or contradictory.

Consider the following example of intercommunication between a
principal and group of students. A number of intervening comments by
both principal and students have been omitted.

Principal: (Walking behind desk and sitting back in chair.) "Come in
and sit down. I'm sure you know that my door is always open. We need
to keep all the issues out in the open. Communication is important.
We had our misunderstandings last time -- let's clear the deck today."

Student: "I'd like to find out why I was told to report to the office
and given a lecture by Mr. ... All i was doing was holding hands with
my boyfriend out in front of the building."

Principal: (Smiling and leaning forward.) "I'm sure you're aware of
the school rules about that. I'm not prepared to discuss that whole
matter again."

In the first instance the principal's words appear to invite
openness and frankness, while his physical actions separate him from
the students. In the second, while the facial expression and body
movement suggest friendliness, the principal's words denote distance and
closedness.

Persons who have a keen awareness of nonverbal behavior can
accurately communicate their own feelings and intentions. They are

more successful in working relationships where persuasion, leadership and organizing of others is involved, than are individuals with limited awareness of nonverbal communication.

The teacher with high nonverbal awareness is able to arrange the environment cf the classroom so as to enhance learning, communication and interaction. The physical space people work in acts as a background for their communicative interactions and can either foster or deter effective and lively ways of learning and relating. Habitual and rigid schemes of arranging classroom furniture can go a long way toward 'deadening' the classroom atmosphere.

Teachers transmit attitudes to children. Some teachers have developed a fatalistic (there is nothing I can do; I don't have enough space) and insensitive attitude toward nonverbal communication (children are here to learn, we don't have time for moving around and 'playing' with the furniture).

One can hardly fail to be profoundly impressed with the insensitivity that is shown by many university students to the communicative aspects of classroom learning. t is as though they have learned that the classroom is a place where one comes to die for 50 minutes and this event should preferably take place as far from the instructor as possible. Further, many exhibit strong resistance to new and experimental patterns of communication that would engage them as active participants. Unless teachers at all levels of schooling are turned on to the nonverbal in their own classroom behavior and environment, they indirectly foster fatalistic and insensitive attitudes

in their pupils.

The range and total number of nonverbal behaviors is enormous. A careful analysis suggests that most nonverbal behavior expresses one of three feelings: like-dislike, status, or responsiveness. Each of these is important in teaching. When we like something - whether it is a person, an object or an idea - we approach. Whatever we dislike, we avoid.

Consider the following example of positive nonverbal communication from a second-grader; "Guess what, Mom? My teacher likes me!" "Why, Jimmy, what did she say?" "She didn't say nothing, but I know she likes me, 'cause when I was reading she put her arm around me and smiled at me. She's nice, I like school!"

There is probably no human arrangement on earth where status does not play some part. Certainly, an important dimension in classroom interaction is status. Status-actions communicate a controlling or dominance-submissive attitude. A teacher may send status messages through speech: "No one gets away with that in my room!" or "When you are older, you will know the answer to that."

However, other status messages are sent through nonverbal means. The arrangement of furniture, standing 'tall in the saddle' behind the lectern, making a child stand while being reprimanded, or, conversely, standing while tne child is cowering in a chair, are all means of conferring status.

A great deal of classroom conflict revolves around issues of status. Consider the following comments by a ninth-grader:

"I just can't stand the way Mr. X 'puffs' out his chest and marches up and down in front of the class. He spouts off like no one else knew anything. You'd think he'd realize how he looks - like a toad or something." It is a pretty safe bet that the status message this teacher presents in his manner of walking, posture and sound of voice have a powerful impact on students.

Responsiveness refers to the degree of one person's awareness of, and reaction to, another. A highly responsive teacher has a stimulating effect upon students; - he is alive, active and aware of 'what's going on here.' On the other hand, a teacher who is tired, indifferent, and apathetic is only vaguely aware of pupils and has a deadening effect. Much lively responsiveness is shown through such nonverbals as posture, facial expression, tone of voice and eye contact.

Training is needed. Sensitive teachers have some awareness of the nonverbal. For example, one teacher commented, "When I see a child starting to distract other children, I seldom say anything. Instead I may just look at him quietly and firmly; other times I nod my head slightly and give a smile that recognizes but does not encourage, or I may even walk towards him, or beckon him to where I am, and then give him some new task."

Another experienced teacher observed: "When I look at work which a pupil is doing at his seat, I often put my hand on his shoulder. He

- 66 -

knows that for this moment, I am really paying attention to him."
These remarks show a sensitivity to the influence of nonverbal
communication in the classroom.

For the most part though, teachers remain ignorant of their non-
verbal influence. And why wouldn't they be? Although nonverbal is a
powerful and pervasive influence in learning, it remains unnoticed
in most teacher education programs. In one of the more extensive
studies of nonverbal communication in teaching, Barbara Grant and
Dorothy Hennings[7] conclude that teaching effectiveness can be improved
by:

- training to increase a teachers' awareness of the nonverbal in
  the classroom, especially one's own behaviors;
- experimenting with, and practising, new nonverbal options, and
- deliberate selection by the teacher of those options that more
  efficiently meet the teaching/learning needs of a classroom.

How is the teacher to increase his range of nonverbal options? In
formal training, such as a teacher education program at a university,
there is little possibility for the development and practice of nonverbal
awareness, until the importance of the nonverbal is 'unofficially'
recognized by the governing bodies of faculties of education. While
such writers as Aldous Huxley have emphasized the importance of the
'nonverbal humanities' for many years, serious attention to nonverbal
behavior within education is just now beginning.

At present, such informal methods as workshops and self-study,
are feasible means of bringing the ABCs of the nonverbal to classroom

teachers. These ABCs of the nonverbal are: Awareness, Behavior and

Communication.

A teacher who has increased his nonverbal awareness, has developed

more conscious control over his own nonverbal behaviors. Such a

teacher has incorporated his awareness and conscious behavior into

patterns of effective interpersonal communication and has begun to

master the ABCs of the nonverbal. We will now examine two informal

methods for seeking these goals.

Self-help with nonverbal behavior. For the teacher who has no

access to formal courses on nonverbal communication and who wishes to

actualize his nonverbal potential, we have worked out a program of

self-activated nonverbal development (SAND).[8] It requires a learning

partner, a set of reading materials, several observation inventories,

and a fair degree of self-motivation. Here is a brief description of

SAND, which consists of seven steps that can be carried out in any

school setting.

1. Partner. The first step is to choose one or several partners who

teach in the same building as you and who share your interest in

nonverbal communication.

2. Read and share. The second step is to read and then discuss with

your partners a set of resource materials on nonverbal communication.

Reading and discussing the materials starts the process of awareness.

3. Self-observation. The third step is to complete a nonverbal

behavior inventory for yourself. This will help you focus on your own

behaviors. After each partner has completed an inventory, they meet, discuss and share reactions with one another; At this point you should try to identify those behaviors <u>most typical</u> of yourself.

4. <u>Mutual observation</u>. The fourth step is to visit each other's classrooms for several brief (20-30 minutes) periods for the express purpose of noting each other's nonverbal behavior and how pupils react to them.

5. <u>Options</u>. After each person has observed the other partner 'in action' they meet for the purpose of comparing self-observations with observations by another. They then decide on some 'options' to replace, improve or further develop typical verbal and nonverbal behavior. It is very important to remember that options include substituting a nonverbal behavior for a verbal; replacing one nonverbal behavior with another; further developing or modifying an already existing nonverbal action or replacing a nonverbal with a verbal behavior. Check out your decisions with your partner and <u>listen</u> to his reactions.

6. <u>Experiment</u>. Now try out, play with, and experiment with these options in your classroom. Remember, that a teacher who has increased nonverbal awareness, and who has developed a greater range of physical actions, has also increased her mental awareness. Everything we try doesn't work. If something doesn't work, don't use it. If it does, develop it further.

7. <u>Review</u>. After having completed the six steps outlined above, meet with your partner(s) and share your reactions to what you have discovered about yourself and others in the subtle world of the nonverbal. You may

even decide to initiate a second cycle of SAND.

For the classroom teacher who wishes to pursue the study of nonverbal and the implications of nonverbal to his own teaching, we suggest the following materials as interesting, informative, and useful:

Grant, B. and D. Hennings. The teacher moves. New York: Teachers College Press, 1971.

Peavy, R.V. Nonverbal communication self-training materials for the classroom teacher. University of Victoria, Faculty of Education Reports, May, 1973.

Fast, J. Body language. New York: M. Evans and Company, 1970.

Scheflen, A. Body language and social order. Englewood Cliffs, New Jersey: Spectrum Books, 1972.

Galloway, C. "Nonverbal communication." Instructor. 77: 37-42, April, 1968.

Sax, B. "Nonverbal communication and its implication for the classroom teacher." Alberta English '72. Spring, 1973, 35-38.

## IN CONCLUSION

Why should a classroom teacher endeavour to better understand and use nonverbal behaviors? One very important result is the increase in self-awareness and accompanying ability to use a greater range of options in most communicative encounters. The key to solving difficult interpersonal conflicts often rests in one's ability to understand nonverbal cues. More effective instruction depends in part on better utilization of communication--especially reduction of teacher "talk", and better rapport with students. How the teacher presents himself as a person is of utmost importance in the classroom. This has been masterfully demonstrated by Bel Kaufman in Up the down staircase.

.Certainly a large part of Miss Barret's rapport with her students was determined by her personal appearance and clothes. Our clothes, our jewelry, our body adornments and personal objects which we character- istically use, are part of that realm of nonverbal called "object language". These items act as important regulators of communication with our pupils, colleagues, and parents. Finally, an increased awareness of the nonverbal can lead to greater clarity of communication in all relationships, a better control over subtle determiners of meaning, and may even reduce deception. That great philosopher of communication, Martin Buber, has observed that the loss of genuine dialogue at all levels of social interaction is the sickness of our age. Any individual who takes steps to improve and authenticate his own dialogue is doing his bit to remedy the sickness. Teachers are in especially important positions, for by direct example and by instruction, they have the opportunity to influence countless others in the direction of improved, authentic communication.

# REFERENCES

[1] Darwin, C. The expression of emotions in man and animals. New York: Philosophical Library, 1872.

[2] Scheflen, A. Body language and social order. Englewood Cliffs, New Jersey: Spectrum Books, 1972.

[3] Eckman, P., and W. Friesen. "Nonverbal behavior in psychotherapy research." Research in Psychotherapy, 3: 179-216; 1968.

[4] Reusch, J. and W. Kees. Nonverbal communication. Berkeley: University of California Press, 1956.

[5] Eckman, P. and W. Friesen. "Nonverbal leakage and clues to deception." Psychiatry, 32: 88-105, February, 1969.

[6] Galloway, C. "Teaching is communicating: nonverbal language in the classroom." (Washington, D.C.: Association for Student Teaching, NEA, Bulletin #29).

[7] Grant, B., and D. Hennings. The teacher moves: an analysis of nonverbal activity. New York: Teachers College Press, 1971.

[8] Peavy, R.V. Nonverbal communication self-training materials for the classroom teacher. University of Victoria, Victoria, B.C.: Faculty of Education, Education Reports, May, 1973.

# A STRUCTURE FOR A READING PROGRAM K-12

## Floyd W. Davis
## Seattle Public Schools

It should come as no surprise that so-called "coordinated and articulated" reading programs Grades K-12, very often are not really programs at all. There may indeed be a set of materials for each grade level, or for several grades in succession and teachers may be slavishly following the teachers' guide; but there is seldom a well thought out management system or a clear-cut idea of all the necessary components so essential to a successful reading program. All too often it is assumed by administrators that the acquisition or adoption of a series of textbooks or of a neighboring district's well-publicized set of objectives is all that is necessary for teaching reading, and while many districts are considerably limited in their ability to develop programs, the situation is not unresolvable.

To help those who would do more than copy, this paper will first describe a model for a K-12 articulated and coordinated reading program and second, it will offer suggestions for implementing that model.

Before describing or proposing a reading system, it is important to review some basic tenets. Most of the following are well documented and discussed in the literature, but for the sake of brevity they will simply be stated without notation.

1. There is no one best method, technique, or set of materials for a specified group of children. This statement does not hold for the individual. There may, indeed, be one best method, technique, or piece of material for an individual, but not so for the group.

2. The phonics first, or the alphabetic-phonetic approach appears to work best with most children. The key word is <u>most</u>. Some children learn best with a "sight" approach and some seem to just learn.

3. One major purpose for teaching phonics is to be able to stop teaching phonics.

4. One major purpose for using a basal reader is to be able to stop using a basal reader.

5. The evidence seems clear that early readers and children exposed to reading at the kindergarten level do retain an academic advantage throughout their school years.

6. Reading can be taught to kindergarten children in an acceptable manner and without psychological or physiological damage.

7. If a child has not learned to read reasonably well by the end of grade three, a repeat of materials and methods previously experienced is not sufficient.

8. Isolation of the slow learner or disabled reader is usually of little help and probably does considerable harm. The severely disabled may require periods of isolation, but they also need and require association with a normal model.

9. Beyond third grade, the reading program must be designed to improve rate, power, and the "how to read" study skills, in effect an extension of the basics rather than a repeat of more and more "phonics."

10. The basic skills of reading must be taught in required courses through grade eight and in elective courses beyond that level.

11. Full graduation credit must be offered for reading courses at the secondary level.

12. Reading and writing are not necessarily mutually reinforcing. Language is essential to both and certainly reinforces the ability to read, but writing is not absolutely necessary to reinforce and support reading. Frequently a lesson in writing is called a lesson in reading. One is encoding while the other is decoding and teachers must be aware of the different skills involved.

13. The relationship between reading and writing is positive, but the correlation is not exceptionally high.

14. One cannot write without being able to read, but the converse is not true.

15. Phonics beyond the initial phases of decoding must be taught for encoding purposes.

16. Individualized teaching/instruction cannot occur with large groups in a form that can be truly labelled individualized.

17. There is no such thing as pure individualization. There are organizational systems which can help minimize the negative effects of rigid group pacing, but true individualization is not achievable within the current state of the art.

18. In general remedial reading programs have not proven highly successful. Alternatives for students who are slow or who are language disabled must be found.

19. Students who have a problem in reading must be accepted into the regular reading program and not pressured or coerced beyond or below their capabilities.

20. Because of the societal make-up of the population in this country, schools, teachers, and administrators have only one social imperative and that is to teach children to read. This does not deny the need to teach mathematics skills, scientific knowledge and so on; it merely takes into account a fact of life. The non-reader, except in very rare cases, is doomed to a life at the lower end of the socio-economic ladder. There are many other items that might be mentioned, but these will suffice as a way to begin this discussion.

In addition to the information presented above it is necessary for the reading program planner to identify or classify the kinds of reading problems which are generally found in all school buildings, and since it is impossible in this short paper to deal with finite areas, some grouping must be done for the sake of efficiency and economy. Taking into account that the following is over-simplified, readers can be grouped into, roughly, four categories: (a) average to better than average, (b) reluctant, (c) remedial, and (d) disabled. Within the average to better-than-average group, there are several kinds of readers: (1) the truly gifted child, (2) the striver, or over-achiever, and the general or average reader. Under the reluctant reader, there are probably two categories: (a) the disinterested reader, and (b) the low-ability child. The remedial reader encompasses those supporting an educational or environmental handicap which precluded an adequate educational opportunity. Under the disabled reader there are at least

two categories: (a) the physiologically handicapped child, and (b) the severely academically or sociologically deprived. Schematically this categorization can be shown as follows :

### General Categories of Reading Abilities

| AVERAGE TO BETTER THAN AVERAGE | RELUCTANT | REMEDIAL | DISABLED |
|---|---|---|---|
| truly gifted<br>strivers<br>general | disinterested<br>low ability | environmentally<br>and<br>academically<br>deprived | physiologically<br>handicapped<br><br>sociologic |
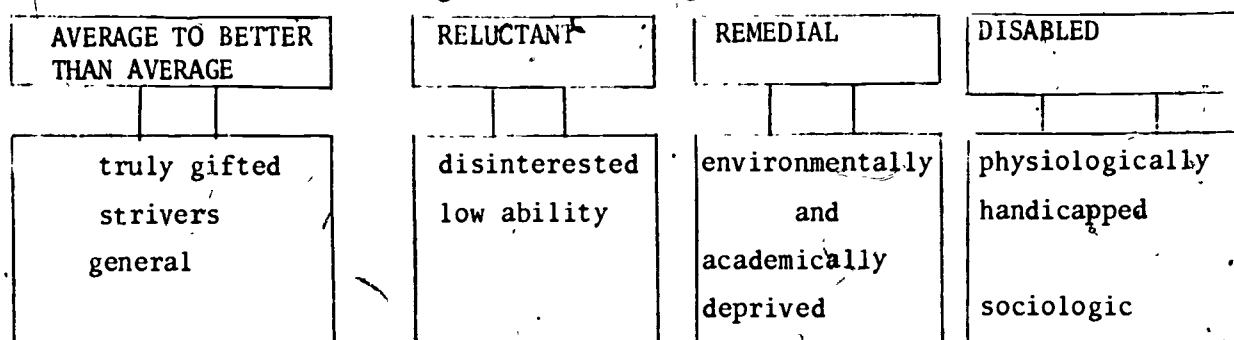
While these categories are not easily defined and are sometimes even less well diagnosed, they exist from the day a class arrives in kindergarten, and while relative numbers may change, each will exist to some degree throughout the school years. The unfortunate aspect is that school personnel know almost nothing about setting up total programs to deal with each in its own way. The ideal operation would be to set up a general program which individualizes the reading assignments for all students in consort with special facilities for treating needs at all levels of achievement Such a program can be described as follows:

1. Set up an individualized reading center in which all children are scheduled from grades four through twelve.

2. Remove the teaching of literature from the English program and transfer literature units into the individualized reading center.

3. Convert the English program into a true basic skills approach with emphasis on the fundamentals of writing, spelling, speaking, and communicating.

4. Set up a study skills center into which students with a special problem or need can be sent for reinforcement and supplementary tutoring. This is not a remedial center; it is a place where the good reader can work on increased rate alongside the slower student who needs help on sight vocabulary.

5. Schedule students with reading problems around such heavy reading classes as social studies, elective literature classes, and other

print oriented programs. These students can be given individual assignments in these content areas and permitted to work them out in the clinic or lab. These relationships are schematized in Figure 1.

It should be noted that for the disabled reader, the program just described may still not be intensive enough and special classes may have to be arranged which will tend to isolate the child for a time. The philosophy must be one of inclusion rather than exclusion, but in a few cases isolation from the regular clar may be unavoidable. Inclusion refers to the attempt to keep all students in a normal learning environment surrounded by a heterogeneous grouping of peers rather than isolation into special classes full of others who are failing. The individualized reading center approach will provide very adequately for the disabled reader, but it will not teach intensive phonics or word recognition. The model just described for Grades 4-12 is based on an inclusion philosophy since it provides for all ability levels without prejudice.

The same philosophy must prevail for the primary grades, but special consideration is required during these precious years. The primary grades are left for second mention since it is important to design the primary program with a long-range goal in mind, namely the needs of the high schrʾ' graduate.

It is probably best to begin with kindergarten and to work upward. Some general comments will be offered followed by a more precise description of an operating program.

It is imperative that a reading program be operational as soon as the child comes to school...preschool, kindergarten, or first grade. It probably is not as important as to what constitutes the content and the style of the reading program as it is that something be done even in a minimal way to introduce and implement beginning reading concepts and simple skills. Of course it is assumed that humaneness, good sense, and some attention to basic research will prevail, but to paraphrase Siegfried Engelmann, "If you don't teach it, you won't get it back." The old idea that one must wait until the child is ready is

Figure 1: A Coordinated and Articulated Reading Program

| CONTENT SUBJECTS | STUDY SKILLS CENTER | INDIVIDUALIZED READING CENTER | BASIC SKILLS ENGLISH PROGRAM |
|---|---|---|---|
| Social Studies Science Mathematics Home Ec. I.A. etc. | Self Paced Programs in English, Social Studies, Science, Rate Building, etc.  Use of programed materials, machines tutors, volunteers, etc. | Literature Units, Power reading, Efficiency Reading, How To Skills,  Use of paper back books, newspapers, magazines, comic books, etc. | Expressive Arts (Drama, Debate, Poetry)  Communication (Emphasis on Composition)  Speaking (Emphasis on Vocabulary Building  Writing (Emphasis on Spelling |

Alternative Course Work

Bypass but Pick up Assignment

Practice Assignment

Bypass Center

Independent Study

Make Contact

STUDENT A

STUDENT B

STUDENT C

fallacious since some children will never be ready without help.   Therefore,
it is imperative that a reading program begin in kindergarten with an
emphasis upon language development and the relationship that language
has to the alphabetic symbols.   It is imperative that children learn
early about letter combinations called "words", and that sufficient time
be provided for practice and application.   The following goals are
offered as generalizations for a kindergarten reading program.   Note
that they are not rigid nor behaviorally stated, but they are testable
and reasonable.

The reading period in the kindergarten should probably be limited
to 15 or 20 minutes, but like all other activities, the teacher must
schedule according to the needs of the class.   There may be days when
interest runs high and extension of the period will be beneficial.   On
other days children may be very non-receptive and the wise teacher should
be ready to drop the activity and to proceed to more productive work.
The goals of the kindergarten reading program are as follows :
All children will:

1.   Be exposed to and know how to write and recite the alphabet,
     both lower and upper case.

2.   Recognize by sight and orally identify the names of both lower
     and upper case letters.

3.   Be able to relate some of the letters to sounds, especially
     the consistent consonants and the short vowels.

4.   Be able to decode monosyllabic words containing short vowels.

5.   Be able to write some of the more common monosyllabic words:
     learned under (4.) above.

6.   Be able to read and comprehend very short sentences using the
     previously learned monosyllabic words.

These goals are more or less ideal and not all children will be
capable of obtaining the ideal.   Some, of course, will surpass highest
expectations.   Most, however, will be able to reach these goals without
undue pressure, and have a great deal of fun and sense of accomplishment
in doing so.   Again, the professional judgment of the teacher is
invaluable in setting up the processes to reach the objective.   It must

be noted that these activities are not intended to fully supplant other desirable programs in art, music, motor development and so forth, but it is imperative that time be alloted for reading on a regular daily basis.

At the conclusion of kindergarten, a reading program must be designed to treat all children who will eventually fall into the four categories noted above. Such a program must offer something specific for everyone, yet it must have a general or basic sequence of skills to be taught to all. For example, since the accelerated child tends to surpass all others in the classroom, it is most important that copious materials and unrestricted progress be provided. Materials can be in the form of paperback books, comic books, magazines, little class newspapers, and pamphlets and unrestricted progress can be provided through a self-selection routine. General or average readers probably will operate well within the basic program, but can use these same trade-type materials as reinforcing agents. The slow reader and the disinterested reader needs the same kinds of support materials to keep interest high and to build attitudes that are positive relative to wanting to read.

The low-ability child must be permitted to achieve at an individual but constant and steady rate. It is ridiculous to set up special classes in first and second grade to accelerate the slow reader when it is quite apparent that the child is unable to achieve to that magic thing called "grade level", at least in these early stages. For the low-ability reader, a simple recognition of the child's abilities and the gearing of requirements accordingly, is essential. For the academically deprived it is imperative that the child must be associated with others at the accelerated and the general or average level as much as is possible. The academically deprived child should be given the opportunity to read constantly, even to the minimizing of other activities such as foreign language, mathematics and other more technical kinds of offerings. Once the experience level has been raised to approximate age-grade placement, other subjects will be much more easily covered.

A program that does not have a built-in identification and diagnostic procedure is not complete. Such a diagnostic-prescriptive operation must provide a basic overall screening to identify the potential learning disabled children in the early stages of beginning reading. For the first grade or two, such a child must observed and tracked very carefully, but not specially placed. Many times children are wrongly diagnosed as being language disabled when maturity will erase the problem. Conversely many children are being called immature when a disability actually exists. For the child who is not immature but exhibits a potential reading problem, an intervention program must be set up that will treat specific deficiencies with very specific methods and techniques.

For the disabled reader, provision must be made, in addition to the regular reading program, for training in visual, auditory, motor, and language disabilities. It is not likely that these functions exist in isolation as illustrated by the following :

|  | visual | auditory | motor | language |
|---|---|---|---|---|
| VISUAL |  | X | X | X |
| AUDITORY |  |  | X | X |
| MOTOR |  |  |  | X |
| LANGUAGE |  |  |  |  |

Visual-auditory, visual motor, visual-language, etc., or combinations involving more than two variables must become a standard part of the intervention program. Each of the disabilities is discussed at length in various journals and professional textbooks and will not warrant further consideration for the purposes of this paper. Suffice it to say that the children exhibiting deficiencies in these categories must be watched very carefully and must be constantly re-evaluated to see that progress is normal and that intervention programs are not lost or dropped from the total

reading curriculum. Again, the approach is one of inclusion with exclusion only in very severe and special cases.

To move back to the general program there are some proven methods, techniques, and schedules that will accommodate these special and general needs. In order to foster a viable reading program in the primary grades, some attempt must be made at lowering class size to the degree that a reasonable amount of individualization can take place. In districts where funds will not permit hiring of extra teachers, a simple administrative scheduling device can be employed and strengthened even further with the implementation of a program that has been given the acronym PRIMIR (PRIMary Individualized Reading). Special schedules in and of themselves contribute little to the act of learning to read. Schedules are devices to move time, people, and materials from one place to another, but in the reading program, unless some change occurs simultaneously within the curriculum, little of worth will result from changing schedules. However, when a well-planned curriculum change or operation is implemented, there are usually certain schedule changes that will promote better operations. In the case of the primary program, the divided day or split-day schedule is beneficial, since it is an administrative device that sets up small groups of children for the reading period. The following schematic illustrates the divided day or split-day schedule.

| 8:40 a.m. | |
| 8:50 a.m. | Morning Group Arrives |
| 9:50 a.m. | A.M. Reading Program |
| 10:00 a.m. | Recess - Second group arrives |
| | Morning activities for entire class - Language arts, P.E., Mathematics, art, social studies, music, etc. |
| 12:00 noon | |
| 12:30 p.m. | Lunch |
| | Afternoon activities for entire class - Language arts, P.E., Mathematics, art, social studies music, etc. |
| 2:15 p.m. | |
| 2:25 p.m. | Recess - Morning group goes home |
| 3:25 p.m. | P.M. Reading Program |

The usual morning routines, such as attendance taking, money collection and flag saluting, are delayed until all children arrive at school. Each reading session, A.M. or P.M., is kept as free of interruption and administrative clutter as is possible.

Note that the day is divided so that there are two reading periods --one in the A.M. and one in the P.M. The times on this sample schedule are for illustration only and local time blocks must be determined by district policy. The example indicates the first group arrives at 8:40 a.m. and begins reading at 8:50 a.m. At 2:15 p.m. the first or early arriving group goes home, and at 2:25 p.m., the late arrivals or second group starts to read. It should be apparent that no more than one-half of the class need be present during the reading periods.

There is a caution on the grouping or scheduling of children in this program. The general tendency is to place the "immature" children in the morning class and the "mature" children in the afternoon class. This is tantamount to grouping slow readers and fast readers into two groups, and there is no data that supports the notion that immature children learn best in the morning. In fact, there is some evidence that separating children into slow, medium, and fast groups is detrimental, expecially to the slow children. Furthermore, it has been the experience of those who have formulated and implemented this program that in general a heterogeneous grouping obtains the best results.

Within the divided day there are many approaches that can be used, but the one cited here, the PRIMIR, is a program that consists of four major elements: a total group approach, a basal group, a self-selection activity, and a one-to-one conference with the teacher. A brief description of each major category or major function is as follows:

In the total group the process is to present sequential lessons on decoding and conceptual skills as they are presented in a basal reader. The lesson presented to the total group is the same lesson that would ordinarily be presented to the top group or reader in the class. Teaching to the top for this short interval keeps the accelerated interested and

challenged and makes the initial introduction to the slower readers.
There will be time to repeat the presentation in another setting.

The total group presentation is presented almost entirely in a
verbal mode. The skill presented in this way makes more of an impression
on the child who may have difficulties since that child will hear others
repeat the skills being taught. This is especially valuable for boys who
tend to need sounds repeated several times.

When the program moves into the middle of the first or into the
second grade, the total group presentation provides the opportunity to
build comprehension and thinking skills. Later on, as children gain
more and more independence, the need for the total group diminishes and
the need for additional time in the basal group and in the conference
increases.

Following the brief presentation made to the total group is a basal
group activity. This group is made up of small numbers of children for
two purposes: the first is to obtain a check on the children's ability
in basic skills areas, and the second is to provide an opportunity for
children to read orally for the teacher.

Once again, all children must be constantly involved. The practice
of reading around the circle or permitting one child to read at the
expense of others is forbidden. Since the basic tenet of individualized
reading is to encourage children to read, then practice in reading is the
key word. Children who sit and listen to others read may enjoy the
activity, but it is doubtful that much reading proficiency is gained
through such a process.

The basal group is nonstatic and is formed on a day-to-day basis
for the purpose of presenting a specific skill, practice session or
concept. For example, if the teacher detects that five children are
having trouble with initial consonant substitution, the basal group for
that day is made up of those children and a lesson is taught out of the
basal reader to help minimize that problem or deficiency. That group
may never meet together again; or new children may join them; or they

may meet again for a repeat of the very same concept.

Other techniques within the PRIMIR program include pairing of children to create companion readers. The process is called "child-on-child" teaching and is probably one of the most effective methods for helping reluctant readers.

The self-selection program includes all the pupils who are not involved in some other activity. The self-selection group or activity is self-descriptive and means exactly what the title implies. The children select any piece of reading material available in the room or in the school.

The rationale for self-selection is to permit children to read material which appeals to the individual taste in terms of reading difficulty and interest. Research has shown that children will learn to read more rapidly when they read material that is appealing, motivating and has been chosen without direction from an adult.

The self-selection program is the practice session of the PRIMIR approach.

Children like variety, especially when they are young and eager to explore. The PRIMIR program utilizes a stations approach to accommodate this need and to facilitate prescriptive requirements if deemed necessary.

The stations-routine provides specific material or equipment in different locations in the room, each with a station number. For example, a tape recorder where children can record the reading of a story and listen to it played back might be Station One. A table with reading games might be Station Two. A film-strip projector, a filmstrip reader, a tape recorder with prerecorded stories, or a set of manipulatory toys for improving eye-hand coordination can be set up as stations.

Perhaps the most important part of the PRIMIR program is the individual conference. This is the time of day when the teacher schedules each child on a rotating basis for an individual conference. This is the one-to-one relationship that is so essential to the individualized reading process. Of course, each child cannot be scheduled every day. The best schedule for each reading session allows time for approximately four conferences on the average. If this schedule is met with regularity, every child will be conferenced once every six or seven days in a regular program with twenty-five children in the room; and on the divided day, every child must be recycled for a conference about every three or four days.

The major purposes of the conference are twofold: First, the conference is held to determine the child's basic skills in reading; and secondly, it is held to help the teacher check the child's comprehension (understanding of and emotional reponse to the material being read). Initially, each conference may last for five minutes or so, but as time progresses, the teacher will find it desirable and necessary to vary the length of each meeting.

Within the PRIMIR program, a basal reader is employed as a skills strand and since research indicates that the alphabetic-phonetic approach is somewhat superior to the so-called look-say, or whole word, it is recommended that a school district replenish its supply of readers with a modern up-to-date set of readers that employs a consistent sound-symbol relationship. In addition to the basic strand materials, parallel readers are required as well as all kinds of trade materials such as paperback books, comic books, magazines, etc.. The schematic below indicates how these materials work compatibly:

BASIC
                    SKILLS
                    STRAND

PARALLEL                                    SELF SELECT
READERS                                     ACTIVITIES

| Basal readers    | NO | YES |   | Paperbacks          |
| Literature       |    |     |   | Games               |
| Short stories    | NO | YES |   | Listening activities |
| ' ' '            |    |     |   | ' ' '               |

                ASSIGNMENT
                COMPLETED
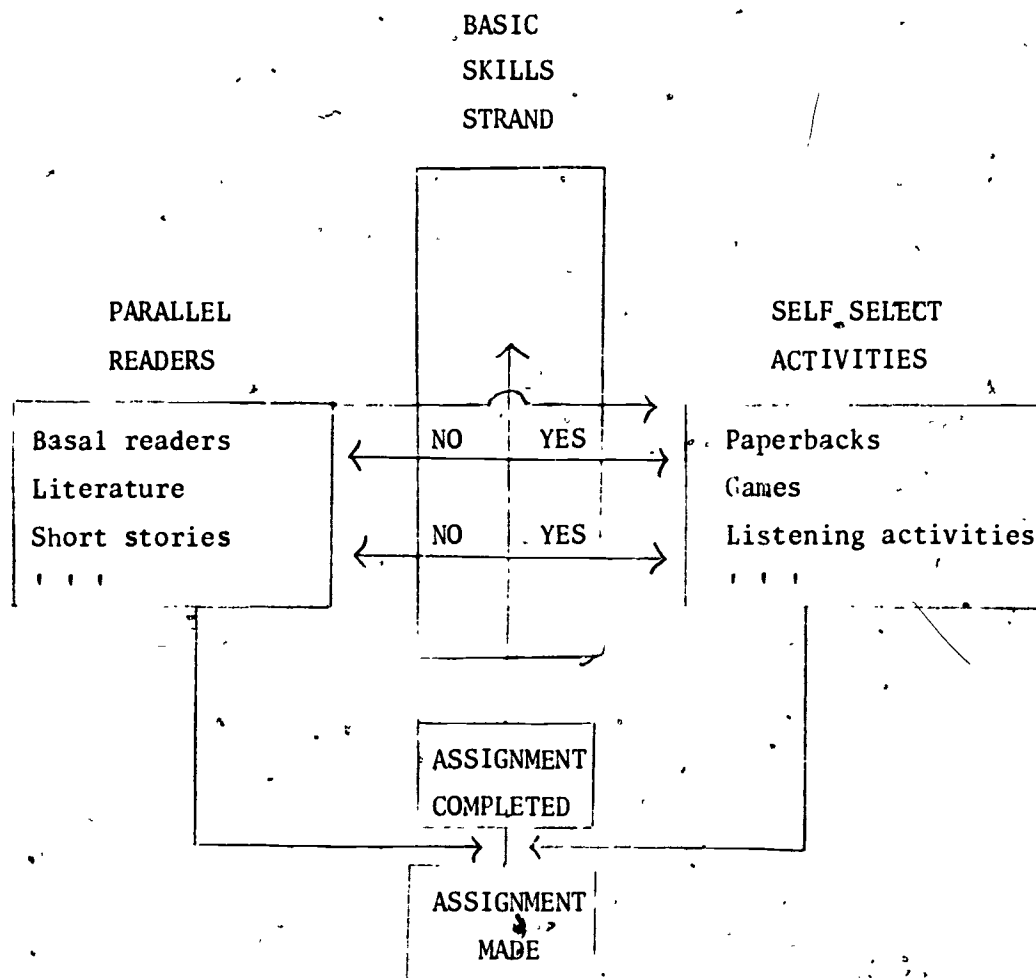
                ASSIGNMENT
                MADE

    As a child progresses up the skills strand, options are provided for
reteaching or reinforcement.    If the assignment is not completed the
child can be recycled into parallel readers.    If the assignment is
completed the child is reinforced through self select activities.

    In summary a primary reading program is more than a set of readers,
three groups and a workbook.    It must include specific activities for
all abilities, strengths and weaknesses.    One program designed to provide
the time and organizational schemata is the PRIMER program.

    Leaving the primary grades and moving into the intermediate grades
again, there is a need to continue and extend the basic fundamentals that
have been taught and fostered in the primary grades.

For the purposes of this paper, a program will be described which has been dubbed "the I.R.C." or the Individualized Reading Center. While the Individualized Reading Center was established first and the PRIMIR program an outgrowth therefrom, the two are obviously compatible with each other since the PRIMIR program contains elements found in the I.R.C. The Individualized Reading Center is set up to teach reading to all ability levels. This is made possible by the major elements contained in the reading center. The first is a self-pacing routine; the second is a self-selection of reading materials; the third is a teacher conference for individual diagnosis and prescription; and the fourth is the teaching of the basic skills of power, efficiency, and "How-To" reading. These various generalizable skills can be shown schematically as follows. Schematic I indicates the general skills taught by the reading center counselor while schematics II, III, IV and V break the general skills into their specific elements. Schematic VI indicates the role that should be played by the content teacher.

In a well ordered, totally committed faculty, the slogan is not "every teacher a teacher of reading," rather it should be "every teacher an implementer of reading." The specific skills required for teaching reading are not possessed by all teachers just as math and science skills are not part of every teacher's abilities. It is just as foolish to believe everyone can teach reading as it is to believe everyone can teach biology. It is logical and necessary, however, to expect everyone to implement the reading program.

A reading center requires no additional space, no extra personnel and can accommodate up to 150 students per day - five hours of thirty youngsters each. This of course calls for departmentalizing or partially departmentalizing the reading program. It is equipped with wire spinners, racks, comfortable furniture, throw pillows, paperback books, magazines, comic books, newspapers, pamphlets, and student-authored materials.

SCHEMATIC I

```
                                              ┌─WORD STRUCTURE
                                  ┌─DECODING   ├─WORD RECOGNITION
                                  │            ├─VOCABULARY COMPREHENSION
                                  │            └─APPRECIATION
                                  │
                                  │            ┌─RATE
                                  ├─EFFICIENCY │
                                  │            └─COMPREHENSION
                                  │
                                  │            ┌─KEY WORDS
 READING                          │            ├─SQ3R
 TEACHER → GENERALIZABLE SKILLS ──┤            ├─READ AND WRITE
 (COUNSELOR)                      ├─POWER      ├─TIME LAPSE
                                  │            ├─CONTENT CLUES
                                  │            └─MEMORIZATION
                                  │
                                  │            ┌─SKIM
                                  │            ├─SCAN
                                  └─HOW TO     ├─READ  VERBALIZE  READ
                                               └─RATE VARIANCE
```

SCHEMATIC II

```
                                    ┌─ROOT WORDS
          ┌─ WORD STRUCTURE ────────├─ETYMOLOGIES
          │                         └─CONTEXT CLUES
          │
          │
          │                         ┌─SIGHT VOCABULARY
          │                         ├─POSITION IN SENTENCE
          ├─ WORD RECOGNITION ──────├─LABELS (HOMONYM, SYNONYM)
          │                         ├─DUAL MEANINGS
DECODING ─┤                         └─INCONSISTENT OR VARIANT SPELLINGS
          │
          │                         ┌─SIGHT VOCABULARY
          │                         ├─CONTEXT CLUES
          ├─ VOCABULARY COMPREHENSION ──┤─FIGURATIVE LANGUAGE
          │                         ├─STANDARD VS. NON-STANDARD ENGLISH
          │                         ├─ACRONYMS
          │                         └─REFERENCE AND SOURCE MATERIALS
          │
          │                         ┌─PLEASURE
          └─ APPRECIATION ──────────└─UTILITY
```

SCHEMATIC III

```
                        ┌─EFFICIENT MATERIAL USE
                        ├─USE OF A PACER (HAND)
                        ├─WORD COLUMNS
            ┌─RATE ──────┼─THOUGHT UNITS
            │           ├─TIMING
            │           ├─CALCULATING RATE
            │           └─SUSTAINED RATE READING
            │
EFFICIENCY  │
            │           ┌─GOAL SETTING
            │           ├─ENVIRONMENT
            │           ├─CONCENTRATION                   ┌─RECOGNITION
            └─COMPREHENSION──┴─LEVELS ──────┬─LITERAL     └─RECALL
                                           ├─REORGANIZATION
                                           ├─INFERENTIAL
                                           ├─EVALUATION
                                           └─APPRECIATION
```

SCHEMATIC IV

```
                          ┌─SIGNAL WORDS
                          │  (ALTHOUGH, BECAUSE, IN SPITE OF)
            ┌─KEY WORDS───┼─PROPER NAMES, PLACES
            │             ├─STORY WORDS
            │             └─SUBJECTS, VERBS, OBJECTS
            │
            │
            │           ┌─SURVEY ┌─SKIM
            │           │        └─SCAN
            │           ├─QUESTION
            ├─SQ3R──────┼─READ
            │           ├─REVIEW
            │           └─REREAD
            │
            │
            │                        ┌─NOTE TAKING
            ├─READ AND WRITE─────────┤
            │                        └─CODE WORDS OR SYMBOLS
POWER───────┤
            │                   ┌─LONG TERM
            │                   │  (24 HOURS)
            ├─TIME LAPSE────────┤
            │                   └─SHORT TERM
            │                      (15 MINUTES)
            │
            │                     ┌─WORD POSITION IN SENTENCE
            ├─CONTEXT CLUES───────┼─SENTENCE VS. PARAGRAPH
            │                     └─PRECEDING AND FOLLOWING WORDS
            │
            │                     ┌─CONCENTRATION
            │                     ├─USE OF SENSES
            └─MEMORIZATION────────┼─TIME LAPSE
                                  ├─NEMONIC DEVICES
                                  └─PRACTICE
```

SCHEMATIC V

```
                      ┌─HEADING TITLES
                      ├─CAPTIONS
          SKIM ───────┼─FIRST SENTENCE IN PARAGRAPH
                      ├─TABLE OF CONTENTS
                      └─FOREWORD


                      ┌─RANDOM WORD
                      ├─PICTURES
          SCAN ───────┼─FORMAT
                      ├─LENGTH
                      └─RANDOM SENTENCE
HOW TO─┤

          READ VERBALIZE        ┌─PARAPHRASE
             READ ──────────────┴─ABSOLUTE REPETITION


                              ┌─SUBJECT MATTER
                              ├─PURPOSE OR INTENT FOR READING
          RATE VARIANCE ──────┼─FORMAT
                              ├─STYLE
                              └─VOCABULARY
```

SCHEMATIC VI

```
                                    ┌─VOCABULARY COMPREHENSION
                      ┌─ DECODING ──┤
                      │             └─APPRECIATION - UTILITY
                      │
                      │                     ┌─RATE VARIANCE
                      ├─ EFFICIENCY ───┤
                      │                     └─COMPREHENSION VARIANCE
                      │
                      │             ┌─ SPECIAL KEY WORDS
                      │             │
                      │             ├─ SQ3R
CONTENT    SPECIALIZED│             │
TEACHER    SKILLS ───▶├─ POWER ─────┼─ READ AND WRITE
                      │             │
                      │             ├─ TIME LAPSE
                      │             │
                      │             ├─ CONTEXT CLUES
                      │             │
                      │             └─ MEMORIZATION
                      │
                      │             ┌─ SKIM
                      │             │
                      └─ HOW TO ────┼─ SCAN
                                    │
                                    ├─ READ VERBALIZE READ
                                    │
                                    └─ RATE VARIANCE
```
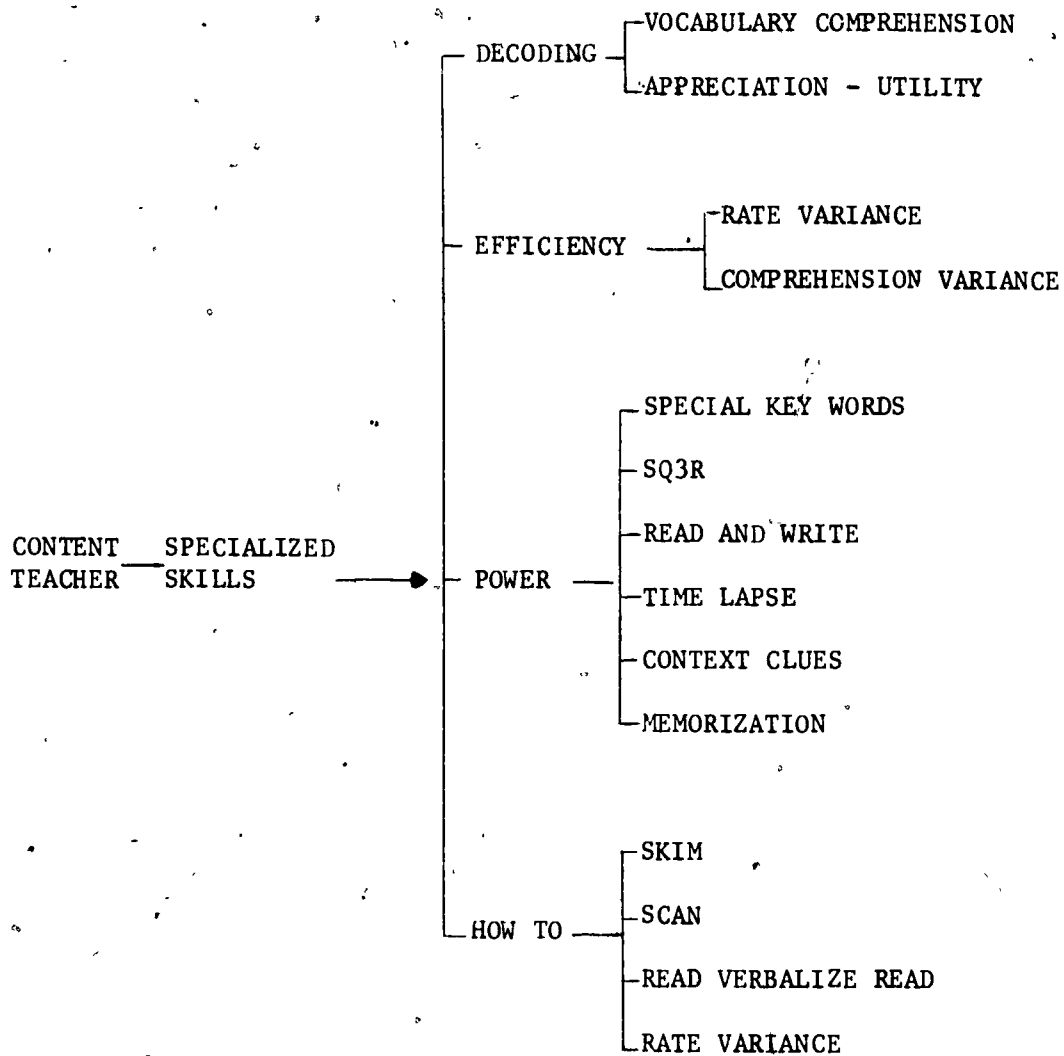
The term "reading center" must not be confused with what is commonly referred to as a reading lab or clinic. A reading lab or clinic usually has a specific task or speaks to a specific audience. The IRC offers a developmental and/or enriched reading course to a general, heterogeneous student population.

The setting up of an Individualized Reading Center requires consideration of the following several factors:

1. Sufficient space must be available to adequately display paperbac! materials with covers showing;

2. A minimum of five paperback books per student is essential as an initial complement;

3. Sufficient auxiliary materials must be available, such as newspapers, comic books, magazines, etc.

4. Prescriptive materials must be available for children who require treatment for specific reading deficiencies;

5. Prescriptive materials must be available for enriching already acquired abilities.

In terms of staffing the center, it is far more economical - in time and energy - to train one or two persons who are willing, dedicated and have some degree of talent rather than to train many and hope everyone can adapt. Experience has shown that not all teachers can survive in the individualized teaching mode. It is an enervating experience.

The reasons for recommending a single individual for each center can be summed up as follows :

1. Not all teachers adapt to the individualized process;

2. Some one person must be in charge of the center to keep the stock up to date and organized;

3. One expert in reading will perform far more efficiently than several generalists.

It should be noted here that once a teacher has been trained and assigned to an Individualized Reading Center (IRC), the title of "teacher" no longer applies. The person who operates an IRC is a counselor in every sense of the word--a reading counselor to be exact. Therefore, all who operate an IRC are known as Individualized Reading Center Counselors (IRCC).

A district wishing to undertake a program such as has been described in this paper will find it necessary to take several steps to set policy or the program will never become operable.

First, the district board of education must declare that reading is of the highest priority in the district and will receive first consideration in funding, staffing, and scheduling. Second, a policy must be formulated and adopted that reading will be taught formally through the eighth year of school and will be offered as an elective in subsequent years. Third, reading must be considered an integral part of the language program, not as an extra activity. Fourth, graduation credit must be given for reading just as it is now given for language arts or English; and fifth, an evaluation program must be devised to overcome the failing grade syndrome. In an individualized program, every child who works to capacity deserves as much credit as the top achiever who is also working to capacity but has fortunately been blessed with more "capacity".

A coordinated and articulated reading program begins at the kindergarten level with clearly but simply stated goals and objectives. The primary years must set the foundation which must be predicated upon expectations for a life career. The program must be individualized to provide for all ability levels on an inclusion basis. In the intermediate years, the program must build and extend the skills acquired in the primary years, and if a good job is done in the primary grades, the upper grade program will have to be individualized, since the spread will be greater than ever. All this will come about only after the district has committed itself to the notion that teaching children to read is the only social imperative placed upon the schools in this country.

AIDING SECONDARY SUBJECT TEACHERS IN GUIDING READING GROWTH

Brother Leonard Courtney

University of British Columbia

For the purposes of this discussion, perhaps we can accept the

assumption that secondary reading improvement is best accomplished in

the subject-matter classroom, the subject teacher recognizing this

responsibility. The basic premise is hardly arguable, its rationale

having long been established in the literature of reading, this despite

the conclusion reached by Walter Hill in his recent survey of secondary

reading over three decades.

> "The apathy of the secondary content teacher toward reading
> efforts has been cited for three decades! Perhaps the content
> teacher of today is, more aware of the generalized nature of reading
> deficiency among secondary students and even sympathetic toward
> efforts of improvement -- as long as they are not personally re-
> sponsible for this help. The problem is complex involving issues
> of occupational selection, preservice indoctrination, ego
> defensiveness, curricular traditions and professional training
> among others." (Walter Hill, "Characteristics of Secondary Reading:
> 1940-70," in READING: THE RIGHT TO PARTICIPATE. Twentieth Year-
> book of the National Reading Conference. Frank P. Greene (ed.).
> Milwaukee, Wisconsin: The National Reading Conference, 1971.
> pp. 20-29, p. 27).

I maintain that any successful content teacher not only is aware

of the importance of reading for his students, of the reading implications

of the content, of the general reading competency of his pupils but that

he also possesses the skills necessary to provide satisfactory reading

guidance to all his pupils within that subject matter. Granted, he

may not be aware of this special capability or comfortable in its

exercise; he may not, in fact, be convinced that reading improvement for

his students is in any way separable from successful content mastery. For,

correlatively, if students are mastering the subject matter, then they

must be applying the reading skills ingredient to that mastery.

Certainly only the content teacher has the experience and insight to

provide guidance for this particular content; no reading specialist,

however insightful and dedicated, can acquire the sophisticated entry

skills of every subject matter -- the principles, the "way of thinking"

unique to that content.

Accepting, then, that the successful content teacher is actually a

successful reading teacher of that content, what viewpoints does he

accept and what techniques does he apply? Briefly let us examine some

of the procedures commonly recommended by reading professionals.

As well as anyone, Olive Niles has summed up the specific skills and

goals common to the study of printed materials in any content area.

("Reading Skills Common to the Content Areas," in FUSING READING SKILLS

AND CONTENT, H.A. Robinson and E.L. Thomas (eds.), Newark, Delaware:

International Reading Association, 1969, pp. 1-16). She subdivides the

reading act into broad, interdependent parts extending from word skills

through the ranges of comprehension from literal understanding to the

evaluation and assimilation of meaning. More specifically, she recommends

continual development and reinforcement of certain related skills of

particular importance: the ability to survey material, set purposes for

reading, and determine an appropriate technique for the reading of any

given piece of material; the ability to handle graphic and illustrative

materials; and the ability to locate, comprehend, and combine information

from a variety of library resources.

Other reading commentators have made similar recommendations,
extending or refining the application of basic skills according to the
observed need of the moment. Marksheffe, for example, wisely advocates
that the content teacher obtain a reasonably accurate idea of each
student's reading level and provide each student with reading materials
at his own-instructional level. ("A Framework for Improvement," Ibid.,
pp. 127-135). Herber and his students have formalized instruction of
reading in the content classroom through the "structured overview" and
the use of "Reading and Reasoning Guides," both based on the essential
formulation of clear objectives on the part of the teacher. (Herber,
Harold L. TEACHING READING IN THE CONTENT AREAS. Englewood Cliffs, N.J.
Prentice Hall, 1970; Herber, Harold L. and Peter L. Janders, Research
in Reading in the Content Areas: First Year Reports. Syracuse, N.Y.;
Syracuse University, 1969). A variety of authors, including Olson and
Ames, have recommended the application of the Directed Reading Lesson
as a practical vehicle for combining content and reading objectives.
(Olson, Arthur V. & Ames, Wilbur S. Teaching Reading Skills in Second-
ary School. Toronto: Intext, 1972). Thomas and Robinson have
assembled a singularly practical guide for reading improvement in
every classroom. (Thomas, Ellen L. & H. Alan Robinson. Improving
Reading in Every Class. Boston: Allyn & Bacon, 1972).

While subscribing to all the principles and procedures advocated
above, this particular task needs something quite specific, immediately
applicable, with reasonable expectation of observable success. I
gather strands from all of the above in an attempt to provide such a

specific technique which every teacher may employ to integrate content and the various skills suggested, which will capitalize on the content teacher's unique capabilities and enhance reading without dilution of the content. In other words, teaching both subject matter and its related reading skills without divorcing one from the other.

In short, every subject teacher can find the opportunity, as need dictates and time permits, to examine the instructional materials which the student is expected to study independently. The teacher may select a passage -- a few sentences, a full paragraph, if necessary a longer passage -- and analyze it extensively, point out difficulties or challenging features, and provide his students with a purpose for continuing individual study.

Yet, and this is undoubtedly the major objection, every subject teacher's class time is already filled. Indeed, the reality of every classroom is the repetitive cycle of half-finished tasks and unfulfilled objectives. It is commonplace to blame the elementary school for inadequate pupil readiness, or to maintain that reading should have been mastered in the earlier years. Two points, however, must be kept in mind. Reading ability is not static; it must improve as the individual grows and his school objectives become more complex. The very nature of the developmental process assumes that reading mastery is never reached and that each stage of any person's growth providing new reading challenges. Then, too, as cognitive demands in subject areas increase, so the ability to think with these new printed materials must be intensified.

The technique which follows is consistent with normal classroom conditions and can be adapted to the moment by any alert concerned teacher. It requires no special skills; it does not negate essential content; it permits considerable latitude in application. At the same time, it includes a range of vital skill experiences for all pupils. It provides occasion to:

1. Establish purpose in reading-study assignments;

2. Utilize experience and previous background to develop meaning;

3. Introduce new vocabulary;

4. Determine word meaning from context;

5. Intensify levels of comprehension from literal to evaluative;

6. Examine semantic and literary nuances;

7. Study paragraph structure and internal paragraph relationships.

Moreover, its flexibility permits extended or limited time allotments according to the needs of the students, the difficulty of the material, and the time limitations of the period.

For demonstration purposes, I have selected three different kinds of passages, chosen principally for their illustrative value rather than for any direct practical transfer to a particular classroom. Each will be treated differently to emphasize the flexibility of the technique.

## Passage 1

To the visitor from the hinterland who lands in mid-town Manhattan, the impression is one of confusion, noise, dirt, and monumental indifference. "Is this," he asks, "the celebrated Mecca that annually draws businessmen, students, job-seekers, and tourists from every corner of the globe?" If he swiftly decides that "It's a nice place to visit, but ..." he has failed to find New York's open sesame. The jade expert can find an emperor's collection of carvings in the Jade Room of the Metropolitan Museum of Art.

The artist can leisurely study a rare volume of William Blake's
etchings in one of the specialized rooms of the Main Library, or
walk for years through the endless public and private galleries.
The chess player finds his friends at the Marshall Chess Club,
the tired businessman his excitement at the Copa, the historian
his archives at the Butler Library, the Orientalist his
confreres at Asia House. But New York's magic door will open
only if the visitor arrives with a key.

Step I: In the analysis which follows, many will recognize the pattern
of the Directed Reading Lesson, a standard elementary-grade approach to
reading instruction. Here the teacher initiates brief discussion of
general background relative to the passage in order to arouse interest
and encourage motivation. In this case, some discussion could focus
on the characteristics of huge metropolitan centers, knowledge about
New York City in particular, and any personal familiarity students may
have with the city.

Step II: Through questioning, words or terms which are unknown or
doubtful to any, even one of the students are identified. (Normally
in the DRL, difficult or unfamiliar proper nouns are automatically
listed on the chalkboard and defined by the teacher. Presumably
"Manhattan" should be readily recognized. For purposes of this study,
"Mecca" is not immediately defined),

The objective here is not primarily to develop new vocabulary
but rather to gain immediate entry to understanding. Since in his
normal reading a student will usually guess at the meaning of an
unfamiliar word, we improve the probability of "Intelligent guessing"
through awareness of the clues to meaning implanted in the context.

It deserves to be noted that most new words which occur rarely in continuous prose and which would have little enduring use for the student should be identified for the moment, noted or recorded only at the interest of the student or if special characteristics make extended application in other situations possible.

It is probable that the following words will be unfamiliar many of the students:

| | | |
|---|---|---|
| hinterland | monumental | Mecca |
| open sesame | jade | etchings |
| archives | Orientalist | confreres |

a. The words should be clarified sequentially as far as possible, two questions usually eliciting basic information: Does anyone know the meaning of _____ (this word)? Is there anything in the sentence which gives a clue to the meaning, or helps you understand the word? Both questions should be pursued, the second providing guidance for slower, more deliberate students. In the case of "hinterland", some students will be able to provide an intelligent guess because of its parallel with "Manhattan".

b. "Monumental" should be easily identified from the text through resemblance to its cognate, "monument", which the students will probably associate with size, rather than significance.

c. "Mecca" is the key word in the passage, doubly important for its governance of the main idea of the paragraph as for the metaphor which controls the main idea. From past experience, some students will

be able to identify Mecca as the holy city of Mohammed, toward which

every devout Moslem turns in prayer thrice daily and journeys in

pilgrimage at least once in his lifetime.  At this stage, it is impor-

tant to eli_it from the students the identification of Moslems and

Arabs, not categori     ut commonly so.  This relationship becomes

vital when investigating the meaning of "open sesame".  Although most

readers will immediately recognize the term and its source, strangely,

the majority of junior and senior secondary students are unfamiliar

with it.  Most will associate "sesame" with the popular children's

television show but not one in five will be familiar with the Arabian

Nights, or specifically the robber's cave which munificently responded

to Ali Baba's command.  Again, in passing, it is some kind of indictment

of modern curricula that so few students are able to appreciate

allusion to once-popular, even traditional, lore, particularly the

ancient fables and scripture.  ("Mecca, in its generic use as a 'goal

for pilgrims' ought to be recorded by the pupils").

d.  Most of the other words have clues in the context to guide

intelligent guessing and, even if an exact definition is immediately

forthcoming, the teacher should lead pupils through a search for the

passage meaning of each word, that is, its sense whether semantic or

connotative within the sentence.  For example, "jade" emerges because

of its setting with "emperor", "carving", and "Metropolitan Museum";

"etchings" ought to be something an artist does; "archives" something

unique to a historian; "Orientalist" is echoed and clarified in "Asia

House".  Perhaps "confreres" may not succumb so easily but who else

might be likely to haunt such esoteric spots as one's "colleagues" -

in the more familiar English usage.

Step III:  Once Mecca and sesame have been related, almost imperatively
the alert reader ought -- but, no, at least to be guided by his alert
teacher -- to fit the "key" into the "magic door".  And, not
surprisingly, once this sustained image, metaphor, or allusion is clear,
so too. is the total passage.  Because    the writer, good public
relations man that he is, has said is that in visiting New York, know
what you wish to savor or else be bored.  The controlling metaphor,
 ustained through the passage from "Mecca" to "key", has twofold value:
not only is it essential to the main idea but students get a rare
reading thrill from recognizing and appreciating it.

Step IV:  Because -- and now glance back knowingly at the paragraph --
there is but a single significant idea conveyed.  The lengthy mid-
portion ("The jade expert ... Asia House.") is strictly illustrative,
only supplementary detail designed supposedly to enforce an idea but
actually interrupting two elements in the metaphor which controls
meaning.  And the meaning extracted has been basically the literal
meaning, the main idea, what the author is saying.  Its significance,
however, is artfully garbed -- nay, disguised -- in terminology which
may baffle the casual reader.

Passage II

     Selections for study may serve to illustrate several skills
although only one may be emphasized.  The following social studies
paragraph, for example, lends itself to two functions:  (1) demonstration
of multiple word skills; and (2) at a very simple level, an almost

stylistically designed shift from literal to critical reading.

> All museum adepts are familiar with examples of ostrakoi, the
> oyster-shells used for balloting. As a matter of fact, these
> "oystershells" are usually shards of pottery, conveniently
> glazed to enable the voter to express his wishes in writing.
> In the Agora a great number of these have come to light,
> bearing the thrilling name, Themistocles. Into rival jars were
> dropped the ballots for or against his banishment. On account
> of the huge vote taken on that memorable day, it was to be
> expected that many ostrakoi would be found, but the interest of
> this collection is that a number of these ballots are inscribed
> in an identical handwriting. There is nothing mysterious about it?
> The Boss was on the job, then as now. He prepared these ballots
> and voters cast them -- no doubt for the consideration of an
> obol or two. The ballot box was stuffed. How is the glory
> of the American boss diminished! A vile imitation, he. His
> methods as old as Time!

I.  Let us quickly examine the word-study potential.

    a.  The proper names Agora and Themistocles, probably recognizable
by the students from previous encounter, should be noted directly.
The significance of the adjective "thrilling" ought to be enlightened
'n the process. Why "thrilling"? Because of the dramatic sound of the
name itself or of the exploits of the person behind the name?

    b.  Few passages permit the opportunity to contrast the two uses
of italics or underscoring. Both are evident here: "ostrakoi",
because a foreign word; identical, for the sake of emphasis. (Under-
scoring the full sentence further in the paragraph is a ready example
of overuse or misuse of the device).

    c.  Another set may be noted in "adepts," "shards," and "glazed,"
to some extent guessable through context or illustrative clues.

    d.  "Ostrakoi" itself is not only self-defined through the accom-
panying appositive but its synonymous use, "oystershell" is enhanced
through the writer's use of quotation marks. Thereafter, assuming that
the attentive reader has noted the similarity, the two words are

used interchangeably.  In fact, "ballot" becomes their equal.  No

reader who has followed the development of the main idea will have any

difficulty attaching meaning to "obol".  The dictionary should be·

unnecessary.  The teacher however can reinforce the use of context

clues by assisting the recognition.

     e.  In the final sentences, "diminished" and "vile" could be

difficult, not necessarily in isolation or denotatively, but because ·

they are employed ironically.  From past experience, however, I find

that the words are scarcely noticed in actual reading because the full

meaning of the passage has already become apparent.

II.  Not surprisingly ·-- as is the case here -- once all the vocabulary

difffculties of a passage are clarified, so too the total meaning of

the writer is often apparent.  This particular passage, however, lends

itself to another, perhaps parallel level of analysis --- a study of

organization and development, a valuable skill for students to learn

and one that is normally enjoyable, as discovery, for both students

and teacher. ·

Most teachers today are familiar with the Bloom <u>Taxonomy of</u>

<u>Educational Objectives</u>, and the separate categories permitting varied

application.  In applying the Bloom categories to levels of reading

comprehension, I have chosen to re-order them.  (It should be emphasized

that these categories are hardly necessary for the average student

but are useful for any teacher's instructional repertory).

     Knowledge -- basic information

     Interpretation -- translation, literal understanding

'Analysis -- minute scrutiny of uses and relationships

Synthesis -- forming conclusions, insights

Application -- using a new context

Evaluation -- judging; responding positively or negatively.

Assuming that the reader accepts the categories, it should be evident
that movement through each stop parallels the supposed advancement
from literal to interpretive to critical or assimilative reading.

The passage we are examining can hardly be considered inordinately
complex; in fact, it is artfully contrived, almost designed as a reading
exercise. The "knowledge" bits are first noted and assembled: the
facts and definitions of the two opening sentences. Interpretation
becomes a global process, accompanying or subsequent to the analysis
which occurs as each sentence adds its new layer of meaning. The
interesting aspect of this paragraph is the underlined sentence, The
ballot box was stuffed, which the writer boldly emphasizes. This is
viewed as the synthesis step, a conclusion which the careful reader
has probably sub-consciously reached. The final two sentences, again
a case of over-writing hardly necessary for most readers, offer both
application and evaluation steps. In retrospect, then, the passage
affords interesting insights to the reading process, a kind of attack
to be applied to more difficult materials, which unpracticed readers
need.

Passage III

Douglas Spaulding, twelve, freshly wakened, let summer idle him
on its early-morning stream. Lying in this third-story cupola
bedroom, he felt the tall power it gave him, riding high in the
June wind, the grandest tower in town. At night, when the trees

washed together, he flashed his gaze like a beacon from this
lighthouse in all directions over swarming seas of elm and oak
and maple.

For a final and different kind of example, let us look at these opening

lines from Ray Bradbury's Dandelion Wine. Bradbury has been very much

a favorite in recent years, particularly for his science fiction. This

popularity alone often dwarfs his other appealing and highly imaginative

writing. I see, on examination of these few lines, only three sentences that

serve two purposes: (1) as introduction to the reading of the story,

developing background, setting, igniting curiosity; and (2) as an

exercise in entry to imaginative language. Let us study the passage

wholly through the use of hierarchical questions (assuming that the

thoughtful reader will avail himself of the guidance implicit in

succeeding questions).

1. What are the basic facts presented in these lines? Who is

spoken of? How old is he? Where is he? What is his physical position?

What is he doing? What does he see? What time of year is it? With

these, we have the literal statement of the passage.

2. On a higher, or deeper level -- What is Douglas's mood or

attitude? What particular time of the year might it be? Yes, June,

but any uniquely personal part of June? How do you conclude such?

What kind of boy is Douglas? Moody? Imaginative? A solitary? What is

the basis, the clues in the context, for such a judgment?

3. More specifically about some of the terms Bradbury employs --

What is a "cupola"? A "cupola bedroom"? Where in the country might

you find such? Why? What was their use? Are there other clues in

the passage to support your view? Note the verb ("idle") in the first

sentence.  Is it an unusual verb, or perhaps an unusual use of the
word?  How would we normally use the verb "idle"? · If, then, a motor
idles, what quality is implied, a quality reflected further in the
passage ("power")?  How does this reflect on your earlier view of
Douglas's attitude or mood, the particular time of year it may be?

4.  If we accept the possibility of the setting being coastal,
what particular significance can you now attach to the language (words)
used in the final sentence?  ("washed", "beacon," "lighthouse," "swarming
seas").  Collected together, how does this idea, this picture in
your mind (image) fit some of the earlier terms and identifications
you have made (power, tower, idle, etc.)?

5.  What can you predict or imagine might happen to Douglas as
this story continues?

It has not been necessary to use any technical terms to elicit
the total impact of these lines.  Yet the student, in considering
answering these questions, has gained real insight into
the use, the variety, and the power of imaginative language.  Hopefully,
he may even be eager to read the story!


## CONCLUDING REMARKS

The passages studied above are only models, selected in part
because they are eminently demonstrable, partly because they fall
within the ken of this writer.  Such paragraph-passage examination,
indeed, is possible with any material -- science, art, industrial arts,
home economics  physical education, mathematics -- particularly when

viewed through the eyes of the person most familiar with the material,
the subject-matter teacher.

The technique can fit comfortably into any content teacher's daily
work, contracting into a five-minute exercise which helps establish
purpose for continuing study while simultaneously providing insight
into some of the pecularities, whether stylistic or content, of the
material to be studied.  It may as easily be extended to a longer period
for more elaborate scrutiny of deeper meanings, word tone, or literary
devices which mask -- or reveal -- significance.

Ideally, I see a teacher using the technique rather casually toward
the conclusion of a class period, remarking to the students:  "Let's
glance briefly at this section of material to be studied for tomorrow.
It's not really very difficult but there are some unusual paragraph
arrangements ... or ... some interesting word uses ... or ... a differ-
ent writing technique which we haven't encountered before ... or ...
you need to sort through the ideas to distinguish what is essential
from what is merely illustrative."

Nor need the paragraph or passage be intricate.  A few minutes spent
in demonstrating through adroit leading questions the transitional
elements which link sentence to sentence or paragraph to paragraph
may make a notable difference in the life of a student.  It is the kind
of thoughtful, leisurely classroom sharing and interaction which
enriches content learning, establishes clear direction for continuing
study and, most of all, realizes the supportive guidance of the
concerned teacher.

CORRECTIVE READING FOR THE CLASSROOM TEACHER:
TOOLS AND TECHNIQUES

Edith M. Gifford

University of Puget Sound

Corrective reading, while basically requiring good classroom

teaching, attempts to determine more accurately what are the child's

learning needs.  It works more carefully and directly toward satisfying

these needs of the child in the poorer reading group.  Corrective reading

may, or may not, differ from remedial reading in classroom organization.

The classroom teacher-tends to teach much of even her corrective work to

children in groups.  Effective diagnosis and recording of findings-will

help the teacher to see which children can be grouped for at least part,

of the teaching process.

Diagnostic teaching is based on alert listening on the part of

the teacher as well as on continuing critical evaluation of the written

work of a given child.  Teachers who consider themselves to be strongly

"on the side of the child", may feel they want "to give the child the

benefit of the doubt" and ignore some errors.  They may think:  "he

didn't mean that", or "he knows better."  Thus they may do the student

a disservice by ignoring the sign of a teaching need which may be contained

in his error.  In order to realize the full value of mistakes the child

makes, there may have to be some change in such a teacher's attitude, as

well as in that of the child.  Children need to understand that their

mistakes are really valuable, that they help one to know just what needs

to be taught or practiced.  Adoption of diagnostic teaching can lead the

teacher to feel far less irritation with the error prone child; the
error is seen as the help it can be, and energy will be appropriately
used in determining how to present the learning task more effectively.

In order to determine what precisely to teach, one develops the
habit of listening critically to all oral reading with at least a pad
and pencil handy to write: (1) the error heard; (2) the actual printed
word in which it occurred. A second error recording approach is to trim
a sheet of clear plastic to the page size of the reader. Then this can
be secured with paper clips to a copy of the child's text so that errors
can be recorded with brush pen as the child reads from a second copy of
the text. A third method which takes more preparation and which is more
typical of the Informal Reading Inventory approach is for the teacher to
record errors on a dittoed copy of the child's material. Still another
way of obtaining samples for analysis is to ask the child to read aloud
from a graded list of single words, such as the Dan Diego List (Potter
and Rae, 1973), starting with words easy for him, and continuing with
higher grade lists until he is clearly at frustration level.

Attempts at sounding words, false starts and other errors
written on a second copy of the list will provide further evidence of
word recognition misunderstandings. Each word error can be analyzed for
the unclear aspect of word recognition which may have produced the error.
For example, if the child says "sheep" and the printed word is "ship"
we are cued in to the necessity of checking other words where such a vowel
sound error would be possible. But we would not check or reteach only
the "ee" sound, we would also check his ability to use the short "i"

sound in new words.  If the student had been absolutely sure of either
of the sounds he should not have made the error.

Another possible reason for the error would lead us to
check whether in the child's usual speech the "i" in ship would have the
"ee" sound.  If so, the problem is not one of reading error.  If not
due to dialect, that particular word error if it occurred in a sentence
could also indicate that the child was not making adequate use of context
clues.  He should be helped to check his word recognition decisions with
a determination of whether the story is still making sense.

We are not concerned here with mispronunciations due to
speech difficulties or dialect differences, (i.e. the omission of word
endings), and only slightly with linguistically determined errors,
(i.e. making a plural to agree with a previously made noun error).
While the goal is perfect oral reading, and every mistake can be analyzed
for teaching clues, one must have a realistic error expectancy, since even
well-educated adults typically do not read perfectly.  Thus, teacher
judgment is still necessary in determining what errors appear often
enough or are serious enough to interfere with the child's ability to
comprehend the material.

If one examines criteria suggested by different writers, one
finds different numbers of word errors permitted, but still the label used
is "instructional level".  Suggestions for permissable errors on
reading at first sight of the material may range from no more than five
per hundred to fifteen, or perhaps even twenty per hundred with some

writers finding still no serious interference with comprehension. Since we are concerned here with the poorer readers in the classroom, and we are aware of the effect of success in motivating the poor reader to further work, probably we should try in most cases to have the child reading material which presents in each hundred, not more than five words giving real interpretation difficulty. If the child is still making five errors in a hundred words after opportunity to read silently, the material is probably at frustration level and he may be limited to just comprehending facts.

Children can be helped to select books which will not be too difficult for them through the use of the "five finger" test, where the child consciously determines how many words he is really unsure of in one hundred words of running text. Teachers can make an estimate of about how many pages in print of a given size are needed to yield about a hundred words. As the child is reading to himself, he puts a finger down on the desk for every word of which he is truly uncertain. If he "runs out of fingers" before he runs out of words or number of pages, the book requires word recognition skills beyond his ability, and, unless his motivation is extremely high, probably would be too difficult for him to enjoy.

Children can help in the selection of books they can read, particularly content area or text-type books, by use of the cloze technique. Copy a selection of one hundred words or so, more for older children, deleting and leaving the same length of blank for every.

fifth word. If they understand what they are reading well enough they should be able to fill in correctly at least 44% of the blanks. Teachers of content areas who find children unable to do this are asking them to read continually at frustration level, and it would be better to obtain materials of lesser difficulty. (Using a readability formula such as that given by Fry, 1968, helps in selection). The cloze type of testing seems to incorporate aspects of both word recognition and of comprehension in its requirements and appears to be one of the better indicators of children's ability to deal with a textbook.

The busy teacher often wants a more rapid way of determining learning needs than those which require her to listen to each child read orally. It is important to get the greatest number of children started on work as near to their appropriate achievement level as possible. Some commercial publishers have attempted to fill this need by providing criterion testing materials for word recognition. Essentially, if the child makes an error on a test word, he is to be taught the skill which helps him to reduce that type of error. This type of test provides several samples of the child's word analysis behavior by having him select via multiple choice or by writing from dictation, several items using the required skill. While appropriately reliable, due to requiring several samples of a single item of knowledge, this very reliability necessitates the use of several testing sessions, usually spread over several days. Some teachers prefer to use a single sample test to help locate problem areas, rather than routinely giving all of the tests until frustration is reached. Other teachers, whose schools do not furnish the more elaborate testing materials, simply use the one item dictation test as their main indicator of where teaching should start.

Typically, this is done by charting children's names along one chart edge and the specific skill, as letters, digraphs known, and so on, along the opposing edge. A colored border on the square at the intersection indicates which child made which errors and makes it easy to see all the children who made the same error and could be taught as a group. Each time the skill is taught or reviewed, the teacher may put a slash through the colored square, to indicate about how many reviews are necessary for that child to acquire a skill. Some commercial criterion testing materials provide optional amounts of service such as test scoring. The superior correlations to additional teaching materials provided by the Wisconsin Design merit special recommendation.

Two cautions are in order when considering this type of testing. As implied above, the one-item-per-skill-test type discussed above will be less reliable than the commercial test. Sometimes it appears that a child has acquire a skill when in fact he was still uncertain; - he just happened by chance to get the sound correct for the one word given. However, the alert teacher should check the results of any test through her observation of the child's daily work. A second consideration relates to the interpretation of findings. When the child does not write the correct symbol for the sound in the word dictated by the teacher, it may be more of a spelling or output difficulty than an indication of a problem with reading. The child may be able to assign the correct sound to the symbol when reading, but have difficulty with the reverse process, which is what is required on the dictation test. Ordinarily if the child is able to write the correct symbols on the dictation test he can also read them correctly in regular words.

After getting the overview of the child's word recognition needs, one should determine which skills may be most readily taught and will make rapid improvement possible in his overall reading. Teachers in upper grades are occasionally uncertain of what would be an appropriate skill sequence. Publishers of most basal series will send a scope and sequence chart showing at what book levels the different skills are taught, thus indicating an approximate teaching sequence. Compromise with an indicated sequence may be useful with a given child. For example, an older child may work on syllabication skills with his peers who are reading at a much higher level, but he may be getting at the same time a strong emphasis on the review or reteaching of consonant and vowel-symbol relationships.

Allied to diagnostic teaching in word recognition is the need to teach inductively and to stimulate discovery learning. For example, in teaching a phonics generalization, after the teacher has given several illustrative words, the child should be encouraged to supply further words, and helped to look for a commonality running through all the examples. (It is useful to list separately the words offered that do not meet the criterion also. The negative instances have value in analysis). The teacher is helping the child in the group to make the discovery of the general principle.

Arranging children's responses to control their excitement, "keep the secret," whispering it in your ear when they have found out the principle, and letting the successful ones leave the group for other work, helps to preserve the opportunity for other children in the group

to learn by discovery. If the child is first told what the general-

ization is, deductive teaching is taking place. The search is

for illustrations for a known rule, and somehow the child does not have

the thrill of figuring out for himself the working of some aspect of our

language. When the child learns inductively, making his own general-

izations, he seems to remember longer, and to be more readily aware of

possible applications to new situations. Something in the process of

searching through the related words and puzzling out how they are alike

appears to leave him more aware of key features and thus better able to

transfer his knowledge to new and unknown words. The child who has merely

memorized the rule someone told him seems to require a longer period of

being reminded to use it than the child who has had the pleasure and

ego-involvement of successfully determining the critical feature for

himself.

Possibly one of the reasons older children are not able to

apply generalizations taught in the lower grades may be that someone

else derives the rule for them. Corrective readers may never have

had the change to learn for themselves the ways in which words are alike.

Even though a pupil may have reached a stage of cognitive development

where, according to Piaget, he should be able to learn abstractions

directly, the child may not be truly beyond the need to learn through

discovering for himself in an area which presents learning difficulties.

Questioning with the informal reading inventory (Silvaroli,

1973) may indicate that the child has more serious difficulty with

comprehension than with word recognition. Does the child know what

type of information he is expected to glean from his reading? Some advance structuring of his search will often be all that is needed to obtain the needed understanding. He may be one who will not get involved unless he has some part in setting his own purposes for reading, and teacher help may be necessary until he learns how to do it. Other children need teacher-set purposes for reading very short passages, and immediate follow-up questioning, rather than discussion only after the reading of a whole chapter. When a child is unsuccessful, the amount read after purpose setting and before discussion may be reduced from a chapter to half a chapter, to a few paragraphs or one, or in extreme cases to question, sentence, discussion. Occasionally comprehension improves quite rapidly once the child finds out what he needs to do to understand the stated purposes.

The informal reading inventory presents the alert teacher with the elements most useful in indicating teaching needed by a particular child. Its material is similar to that used in the classroom, it provides major clues to word recognition needs for the analytical teacher, and it checks on comprehension using the types of questions a teacher should be asking in day to day work. Since in the U.S. the National Assessment of Educational Progress in Reading results seem to be telling us we are not effectively teaching the reading skills beyond comprehension of facts, we must be alert to the need for more practice in answering questions of the main idea and inference varieties. Home made and published informal reading inventories could benefit from the addition of the main idea question to the generally included fact, vocabulary and inference types. The teacher who carries on diagnostic teaching is, with the addition of a few record-keeping procedures, able to group

efficiently and teach in accordance with most children's specific needs.
In this way, she helps to correct lags in achievement before they have
the opportunity to snowball into severe reading problems.

# REFERENCES

Potter, T. and Rae, G.  Informal Reading Diagnosis.  New York:  Prentice-

Hall, 1973.

# BIBLIOTHERAPY IN THE CLASSROOM

## R. Vance Peavy

### University of Victoria

In this paper we shall briefly examine what is meant by biblio-
therapy and consider what knowledge, skills and tools are needed by the
teacher who chooses to use bibliotherapy in the classroom.

Paradoxically, bibliotherapy is both old and new.  The knowledge
that what is read by a person interacts in various ways with his
personality (i.e., needs, beliefs, ideas, moods, feelings, imaginings,
etc.) is probably as old as written language itself.  The practice of
recommending specific readings for the "good" of the reader began at
least in ancient Greece.  The library at Thebes bore the inscription,
"The Healing Place of the Soul."

Within the last fifty years there has been a transition from
"prescribing" reading based on moral rationale to reading "suggestions"
based on psychological rationale.  From exhorting readers to read
selections which would tell them what they should do from a moral
standpoint, bibliotherapy exponents have steadily shifted their thinking
to psychological foundations with attempts to explain and describe
"how" literature actually affects the reader, what the nature of
literature/reader interactions are, and how reading and discussion can
be related to mental health objectives.

The term "bibliotherapy" came into usage about 1916. It is now

used to describe various educational and therapeutic methods used in

psychiatry, psychotherapy, counselling and guidance, social work and in

educational classrooms. In the field of counselling and psycho-

therapy Caroline Schrodes' 1949 doctoral dissertation[1] is a landmark

study in the use of bibliotherapy as a therapeutic method. She

introduced a broad definition of bibliotherapy as "a process of inter-

action between the personality of the reader and imaginative literature

which may engage his emotions and free them for conscious and productive

use". This is of sufficient scope to suggest uses of imaginative

literature (novels, plays, short stories, poetry) not only in the context

of psychiatry and counselling, but also in the context of classrooms

and libraries.

Lindahl and Koch have provided a specific rationale for the class-

room teacher's use of bibliotherapy:

> Inasmuch as the building of a wholesome, self-confident,
> self-respecting, effective, happy personality is one of
> the major goals of education, the teacher is seeking
> constantly to find ways of giving each child the particular
> guidance that he needs. One of the ways in which such
> guidance can be given is through suggestions for recreational
> reading in which the child may receive mental and emotional
> therapy through identification with a character in a
> book who faced a problem or situation similar to the child's
> own problem or situation. [2]

---

[1] Schrodes, C. "Bibliotherapy: a theoretical clinical and experimental
study". (Ph.D. Dissertation, University of California at Berkeley, 1949).

[2] Lindahl, d. and Koch. "Bibliotherapy in the middle grades". Elementary
English, 29: 390-396, 1952.

We can extend this rationale by pointing out that bibliotherapy
is not limited to the use of books. The materials of bibliotherapy
can be drawn from the whole range of human knowledge: imaginative
literature, educational and informative materials including pamphlets,
popular psychology books, magazines and articles, biographies, auto-
biographies and diaries, writings in history, science, the arts and
folklore. We can go even further to include, as well as the printed
word, film, recordings and pictures.

We can also recognize that while bibliotherapeutic methods are
certainly appropriate for the child, they can also be applied to the
adolescent and the adult. We can say, then, that bibliotherapy refers
to the process of using various kinds of reading material in the teaching
of children, adolescents or adults to achieve psychological or mental
health goals.

What are some of the learning objectives which the teacher may hold
as appropriate to bibliotherapy activities in the classroom?
Five important general objectives are:

1.  Help individual pupils build and improve personal relationships
    with others.

2.  Promote personal development, self-understanding and psychological
    insight.

3.  Assist pupils to gain information and examples which lead to
    cultural and intercultural insights.

4.  Aid in the socialization process--literature is a primary medium
    for the interaction of emotional and intellectual processes.

5.  Present behavior modes, insightful suggestions, new examples, information and discussions which enable individuals to better meet personal needs and solve life problems at specific stages in psycho-social development.

In more specific terms, bibliotherapy can aid the individual to:

1.  Verbalize problems

2.  Get personal insight

3.  Acquire accurate information

4.  Reduce sense of isolation

5.  Think about and discuss problems with greater objectivity

6.  Weight values, beliefs and re-orient life goals

7.  Assess personal limitations and assets

8.  Enlarge interests, and

9.  Prevent problems from occurring

These are not the only aims of bibliotherapy in the classroom, however they are representative of the psychological and mental health goals toward which all bibliotherapy activities are directed.

## What Psychological Processes Are Activated By Bibliotherapy?

We have already noted that the act of reading causes interactions between reader and that which he reads. These interactions are potentially important in the prevention and solution of life problems and in the development of healthy, effective personality. The most important processes which are brought into play through reading are identification, projection, catharsis, insight, reflection and universalization.

Imaginative literature enables the reader to be spectator and participant simultaneously. By identifying with elements in the material read, a reader can view his own experience with the safety and fresh perspective of an observer. As the reader identifies, he projects his own feelings, values, thoughts and experiences into the reading material. In doing so he brings aspects of himself which otherwise remain untapped, into conscious thinking and discussion. The activated processes of identification and projection may yield insights into his own personality as well as insight into conflicts and relationships with others. Through interested reading and especially through discussion of what is read, a pupil often will be able to let out (ventilate) feelings, fears and concerns which otherwise remain unexpressed. This ventilating process is referred to as catharsis. Finally, as every discerning reader must know, when we read of others' struggles, conflicts and solutions, we gain the knowledge that we are not alone--that our own personal condition is but one part of the universal human condition. From this realization alone we may derive considerable relief!

Bibliotherapy activities have a wide range - from merely reading informative material for factual gain; to reading-discussion or play-reading groups for enjoyment and socialization; to more carefully guided reading and discussion for specific preventive, remedial or therapeutic objectives. Nearly all activities emphasize to some degree the elements of self-insight, decision-making and reality testing, emotional release, and information.

What knowledge and skills are needed to conduct bibliotherapy
within the context of the classroom?

With regard to knowledge, the basic requirements are:

1. A wide acquaintance with literature and other media especially
   as it relates to the developmental needs of individual pupils.
   No one can read everything of course, but a lively interest
   in literature coupled with the ability to make materials
   accessible to individual pupils on an individual need basis
   is essential.

2. A working knowledge of the developmental needs of the pupils.
   An obvious example of this is the way in which the developmental
   stage of the individual will determine his need for, and use of,
   sex role and information literature.

3. A knowledge of the psychological mechanisms which are brought
   into play through reading: identification, projection, catharsis,
   insight, empathy and universalization. Beyond having a
   knowledge of these mechanisms, the teacher should have
   some skill in working with them toward the general goal of
   improving personality function.

In addition to the three areas of knowledge listed above, there
are qualities and skills which are demanded of the effective biblio-
therapist. An important skill, or set of skills, is indicated by the
term "reader's adviser". A teacher must be able to determine reading
readiness and reading level and must be skillful in matching interest
level of the reader with material. An effective reading adviser is also
adept in displaying materials, describing them in understandable,

accurate terms, and is able to discuss selection with pupils in a

friendly, mutual way. A reader adviser working within the context of

bibliotherapy must be able to accept the principle that in choosing

reading materials reading interest always precedes literary value.

This is a difficult principle for many to accept; yet if therapeutic

rather than scholarly goals are to be met, then selection must be on

the basis of psychological considerations rather than literary or

academic goals. Personality changes occur primarily through emotional

experience rather than intellectual experience. It is in this regard

that imaginative literature has such great merit. By bringing both

emotional and intellectual facets of the reader's personality into

play, the conditions for constructive personality change are improved--

but only if the reader is able to respond with interest to the material

he reads.

Another set of skills required for the successful conduct of

bibliotherapy are interpersonal skills--those necessary for encouraging

and leading group discussions. There are many specific interpersonal

skills. Some of the most important are:

1. Ability to adopt a non-judgmental attitude

2. Ability to listen accurately

3. Ability to respond with warmth and empathy

4. Ability to use productive questioning

5. Ability to speak concretely and with genuineness, and

6. Ability to give and receive feelings

Bibliotherapy is at least a two-step process. The first step is reading; the second is discussion. Both are essential. If the second is neglected, then the experience remains largely vicarious. Through discussion, either in a teacher-pupil interview for that purpose, or in a group, the personal feelings, conflicts, values and concerns of the individual are brought into view, and the opportunity for insight, re-orientation and spectator-participant dialogue is provided.

While it is possible to become extremely enthusiastic about bibliotherapy, certain limitations are not to be overlooked. First, it clearly is an adjunct to other activities. Bibliotherapy does not replace other reading activities in the classroom just as it does not replace other therapeutic techniques in counselling and psychotherapy. Used with skill it is a valuable supplement, but is not a panacea. Although use of bibliotherapy is steadily increasing, it is to be regarded as a relative newcomer in psychological education for there is not an extensive research support for its efficacy either in or out of the classroom. In this regard, it is interesting to note that, to our knowledge, there are no significant research findings which contradict its (proper) use.

There are individuals both at the child and adult level for whom bibliotherapy is not indicated. For example, some use what they read not for self-insight, but merely to further rationalize their problems. A second caution is to be exercised with the reader who substitutes his vicarious insight for real progress on actual life-problems. Third, we meet persons who frantically comb the literary world looking for more symptoms to adopt as their own. Readers who

interact with reading material in these ways should not be encouraged
to do so for the result is an aggravation rather than a lessening of
difficulties.

Bibliotherapy is related to other adjunct methods such as music
therapy, art therapy, poetry therapy, writing therapy, play therapy,
and drama therapy. All of these have several elements in common with
bibliotherapy. One common element is that all are designed to engage
the emotions of the individual. A second common thread is that each
provides an opportunity for the individual to project aspects of his
personality and thus make them available for discussion. Each promotes
the strategy of simultaneous observation and participation. Increased
self-insight is a primary goal in each procedure. And, not least of all,
each brings the pupil into contact with creative potentials--both within
himself and · the medium through which work is being done.

Among other adjunctive methods, writing therapy is probably the
most closely related to bibliotherapy. The use of writing as a therapy
is well-documented. To pursue mental health objectives through writing,
various writing styles can be used: autobiographies, diaries, letters,
open-ended questionnaires, verbatim recordings, and certain literary
compositions--such as poetry and self-directed themes or essays. The
use of therapeutic writing in the classroom derives from the rationale
that practices in modern society in general and school in particular
starve people of op rtunities for working out self-identity. This is
a denial of the fundamental effort needed to confirm for each person that
he exists, that he is alive and whole, and that he feels strong enough,

good enough, and confident enough to continue to exist. Writing in the classroom can be seen as one way in which each student can build and confirm for himself a personality which is distinct from his peers. Through therapeutic writing a person can learn to <u>present himself to the world as the distinctive person he is</u>. The skillful and imaginative teacher will have little difficulty in grasping the relation of bibliotherapy to therapeutic writing, and he will be able to use them in complimentary ways for attaining mental health goals in the classroom.

For the teacher who wishes to use bibliotherapy in the classroom, there are at least three preliminary, practical steps to be taken. Probably the most sensible first step is to build a working personal library on bibliotnerapy methods and materials. Second, is the adoption of functional taxonomy of problems as experienced by pupils. A third step is to begin compiling readings which relate to each category in the taxonomy of life concerns. Fortunately, there are already a number of taxonomies which have been published together with suggested readings. However, most teachers who undertake bibliotherapy seriously, will probably want to modify such compilations to satisfy their own working and reading preferences and contexts. Examples of helpful compilations are:

Carlsen, G.R. <u>Books and the teenage reader</u>. New York: Bantam Books, Inc., 1967.

Crosby, M. <u>Reading ladders for human relations</u>. Washington, D.C.: American Council of Education, 1963.

Horn, T. and D. Ebert. <u>Books for the partially sighted child</u>. Champaign, Illinois: National Council for Teachers of English, 1962.

Porterfield, A. <u>Mirror for adjustment</u>. Fort Worth, Texas: Texas Christian University, 1967.

Topical categories for the first three of the above are given in

Appendices A, B, and C of this paper.   In addition to these compilations,

there are numerous other references on bibliotherapy.   Two which are

especially helpful are:

> Bibliotherapy: methods and materials. Chicago: American Library
>     Association, 1971.

> Zaccaria, J. and H. Moses. Facilitating human development through
>     reading. Chicago: Stipes Publishing Company, 1968.

We will conclude with a list of guidelines for      thers under-

taking bibliothe apy:

1.  Are you familiar with the material which your pupils may be

    considering?

2.  Are you engaging pupils in mutual selection?   Don't impose!

3.  Are potential reading materials visible, available and free?

4.  Are you searching for interest-arousing reading materials?

    Shorter is better than longer!

5.  Are you keeping in mind the individual student's reading level

    and possible disabilities?

6.  Is informational material up-to-date and accurate?

7.  What are you doing about your own communication skills?

    Listening?  Empathic responding?  Withholding judgment?

    Effective questioning?  Ability to deal with feelings?

8.  Are you providing an opportunity for individual and group

    discussions on materials read--at a time and place convenient

    for your pupils?

9.  How is your relationship with the school or district librarian?

    Have you got their cooperation on bibliotherapy yet?   They may

get involved with book displays, annotated book lists, help

you by supplying references, even films, records and pictures!

10. How are you relating your efforts to the rest of your class-
room activities and to similar efforts of other teachers in
your department or building?  Are your efforts in concert
with those of special teachers, the school counsellor or the
school psychologist?

11. How about a therapeutic reading grou in the adult education
section of your district or in the local community college?
What about book talks and story hours at the local library?

Karen Horney once wrote, "Fortunately, psychoanalysis is not the
only way to resolve inner conflicts.  Life itself remains a very
effective therapy."[3]  And two of the most important elements of
therapeutic living are insightful reading and thoughtful, caring
discussion.  Bibliotherapy is addressed directly to these two
fundamental elements thus providing the skilled and prudent teacher with
valuable principles and techniques for assisting pupils to reach mental
health goals within the context of the classroom.

---

[3] Horney, K. _Our inner conflicts_.  New York:  Norton, 1945.

# APPENDIX A

### Topical Categories of Booklists (Annotated) in
### Books and the Teenage Reader by G.R. Carlsen
### New York:  Bantam Books, Inc., 1967

Topical Categories of Booklists (Annotated) in
Reading Ladders for Human Relations by M. Crosby
Washington, D.C. ACE, 1963

| Topic | Leve. | Pages |
|---|---|---|
| How It Feels to Grow-Up | | |
| | Primary | 42- 46 |
| | Intermediate | 46- 50 |
| | Junior | 50- 60 |
| | Senior | 60- 64 |
| | Mature | 64- 66 |
| The Individual and the Group | | |
| | Primary | 69- 73 |
| | Intermediate | 73- 77 |
| | Junior | 77- 83 |
| | Senior | 83- 86 |
| | Mature | 87- 88 |
| The Search for Values | | |
| | Primary | 91- 94 |
| | Intermediate | 94- 99 |
| | Junior | 99-107 |
| | Senior | 107-113 |
| | Mature | 113-116 |
| Feeling at Home in Our Country | | |
| | Primary | 120-124 |
| | Intermediate | 124-129 |
| | Junior | 129-132 |
| | Senior | 132-135 |
| | Mature | 135-137 |
| Feeling at Home in Other Lands | | |
| | Primary | 137-140 |
| | Intermediate | 140-146 |
| | Junior | 146-150 |
| | Senior | 150-153 |
| | Mature | 153-155 |
| Living With Change | | |
| | Primary | 158-161 |
| | Intermediate | 161-165 |
| | Junior | 165-170 |
| | Senior | 170-175 |
| | Mature | 175-178 |
| Living as a Free People | | |
| | Primary | 181-184 |
| | Intermediate | 184-192 |
| | Junior | 192-199 |
| | Senior | 199-203 |
| | Mature | 203-206 |

APPENDIX C

Topical Categories of Booklists (Annotated) in
<u>Books for the Partially Sighted Child</u> by
T.D. Horn and D.J. Ebert
Champaign, Illinois: NCTE, 1962

YOU DON"T HAVE TO BE AN EXPERT....

SOME THOUGHTS ON THE USE OF ROLE-PLAYING

IN THE CLASSROOM

Judith Koltai

University of Victoria


> "What a dangerous activity reading is: teaching is. All
> this plastering on of foreign stuff. Why plaster on at all
> when there's so much inside already? So much locked in? If
> only I could get it out and use it as working material. And
> not draw it out either. If I had a light enough touch it would
> just come out under its own volcanic power....Unsentimental and
> merciless and shockingly beautiful..."
>                                         (Sylvia Ashton-Warner)

These are the words of a teacher. I read on and, as I do, the

words resound with a familiar echo inside me. I could have said that.

I have thought those thoughts and felt those feelings. I am a teacher,

too. I understand. And now, immediately, there is a bond between me

and the written word which makes my reading intimately personal and

deeply meaningful.

Understanding through my own experience is the bond that unites

me with everything that is not me. It is the path that brings me into

relationship with the world of others. I live in my life space which

looks entirely private and personal to me. But my private world

overlaps with millions of other private worlds in many ways. It is

also very different from other private worlds.

When I role-play, I step into another private life space. I try

to see things from someone else's point of view. By realizing what is

similar or common between this other world and mine, I discover the deep bond through which relationships are built. By experiencing differences, I enlarge and widen my own world. I may also begin to see differences not as threats to myself and my values, but as new possibilities for learning. I am, then, more likely to approach someone different than me with tolerance and a desire to understand, rather than with suspicion, hostility and defensiveness. From another's point of view, I can also see myself as others see me and thereby have a clearer understanding of how I affect others and why they behave towards me as they do.

I experience myself by moving, acting and interacting in the world. I experience others by hearing them, seeing them, reading about them. Hearing, seeing and reading satisfies the mind. In order to bring about meaningful organic understanding, my "intellectual" side has to be extended into an experience that touches my body and heart, as well as my mind. Role-playing is a method through which such an extension can happen. The ancient wisdom of a Chinese saying expresses it this way:

"I hear and I forget; I see and I remember; I do and I understand."

When I ask myself 'What is it like to be blind?', I can get an answer to my question in two ways. I can gather information through questioning, watching, reading about blind people. Another way is to close my eyes or blindfold myself and try to walk around in a room or in a busy street. The first method would possibly satisfy my curiosity for the time being. The second way would provide me with a deeply

lasting experience which, most likely, would affect my future ways of relating to blind people. However simplified, the above example clearly illustrates the function of role-playing.

The experience is scientifically intangible, it is transitory and difficult to define in terms of measurable "progress". Yet for those who are concerned with the joyful and meaningful growth of the whole human being it is nevertheless a valid experience.

Creativity is the essential ability of man which distinguishes him from the upper primates. It is the ability which enables him to overcome the limitations of his brain, his body and the material world. Role-playing is directly dependent upon creative imagination. When actively practiced, it also enhances and stimulates creativity. When we pretend to be someone else, we learn to appreciate another's point of view and this is a vital part of the organic process of living and learning. It is the way in which a young child tries to grapple with things he does not comprehend. It is his most organic and original method of learning. Ultimately, world peace depends on the ability of people to accept and respect basic individual differences. If education is to enable human beings to further enhance their highest human qualities, this basic potential must be accepted and encouraged.

For the concerned classroom teacher the question then is: "How do I do it?" Many wonder if they need to have special training and acquire expertise before they can venture into using role-playing as a safe and appropriate activity in school. The fact is that role-playing is not a new technique. Neither teacher nor child need to learn it.

Pretending and play-acting are activities we have all engaged in at one time or another.

The role of the teacher is to expand this inherent and natural activity into a constructive and insightful experience. In order to do this, the teacher must possess certain personal qualities. But these are not unique to the role-playing situation. They are qualities which most teachers strive for all the time.

For one thing, the teacher must be an open and spontaneous human being. He must be trusted by the children in his classroom; his sincerity must not be doubted. Children must feel they can confide in him without fear of being betrayed. He must look upon the concerns of other people, regardless their age, with care, respect and genuine interest no matter how small or insignificant the problem seems to him. Children need to feel accepted for what they are in his presence. Suggestions for change must come as encouragement and support rather than biting criticism.

Many teachers who possess these qualities are reluctant to engage in role-playing activities because they fear such activities will weaken classroom discipline. Some feel they need to have deep psychological knowledge in order to deal with personal and emotional issues. These concerns are understandable, but there are many ways in which the interested teacher can resolve them.

One way is through self-education. A teacher may gain considerable knowledge and understanding of role-playing strategies by consulting various literary sources. Another way to learn about role-playing is

- 141 -

by attending various inservice workshops. Here one may observe
and practice many role-playing techniques.

But even after reading and experiencing, some teachers feel
hesitant about their ability and competence to actually get started
in their own classrooms. One of the most important ways to overcome
this initial hesitancy is not to expect too much of yourself or the
children. Begin with short sessions. As you become more experienced,
the activity may be expanded accordingly.

Student concentration and absorption are essential objectives in
any role-playing activity. To prepare children for a role-playing
activity, it is sometimes helpful to devote a few minutes to simple
concentration exercises. They may be encouraged to close their eyes
and listen to sounds outside the room, inside the room or to the sound
of their own breathing. The imagination can be brought into action by
suggesting that they try to visualize what is causing the sounds they
hear. Later this might be dramatized. For example, if a voice is
heard from outside the classroom, the children might be asked to
imagine the person the voice belongs to, and then sit, walk or gesture
the way this person would.

Next, simple charades and warm-up exercises might be introduced.
Make sure everybody is working at the same time. Many children need
to practice without being watched by others before they can feel
safe in presenting themselves in a role.

No matter how simple the enactment or how humorous, always encourage
sincerity and absorption and discourage the showing off of so called

dramatic talent. The concern of the teacher should be to promote genuine and insightful experiencing on the part of children, and not with the maintenance of "acceptable" behavior. It may be necessary to tolerate some "bad" English and, perhaps, some coarse language - but only if it is genuinely part of the character explored and not a simple attention-seeking or testing device. A sensitive and accepting teacher will soon learn to differentiate between the two uses.

Skillful questioning is a key device on the teacher's part. Pay attention to detail. Ask questions about the character's appearance, bodily mannerisms, voice, clothing, environment, etc. After the externals are established, ask questions which explore inner motivation. ("Show me why your character does this.", rather than, "What is he doing?") Ask what the thoughts and feelings of the character are while the child is performing the action. Accept the child's interpretation don't impose your own opinions and motivations.

The teacher's most important function during the role-playing session is to listen and watch for the relevant cues from the children. He must allow each child to be his own director. But whenever the 'actors' have difficulty in starting, or if they "get stuck" during an enactment, a teacher may use his own skills to stimulate action.

The non-participating members of the class may be encouraged to ask questions of, or make suggestions to, the actors. This procedure may be helpful in maintaining their interest. It is also important to follow up the enactment with discussion so that those who watched will

have an opportunity to share their own thoughts and feelings about the problem.

Selecting the problem situation is a decisive step. Whether or not the children are involved in this decision, it is essential that they see the problem as relevant and meaningful to them. Selection of the problem may depend on the needs of the individual learners as well as the specific educational goals of the teacher,

In order to develop better understanding of oneself and others, the teacher may select a problem which is personally relevant to one or several children in the classroom. An example might be the problem shyness in the classroom. Children might enact various situations in which they feel personally shy or embarrassed. Later they could try out various ways of behaving to lessen such anxiety. A general discussion might follow about what makes people feel shy. Is shyness only a problem for children? Do you know any shy adults? How do you know someone is embarrassed? What can you do to help them feel more at ease?

Another problem which might be examined is that of individual differences among people. Role-playing may help the child to be more accepting of others. By seriously enacting the role of someone who is very different from himself, the child may gain insight into the feelings and motivations of himself and others.

Interpersonal problems such as fighting or stealing may be examined in a role-playing setting. The purpose may be to help the

- 144 -

child to find an alternative solution to his problem. For example,

it might be instructive to enact a situation where two people get into

a fistfight. (It is helpful to practice mock-fighting under controlled

circumstances such as slow motion or to drum beat before hand.) This

might be followed by questions to stimulate discussion. How do you feel

after the fight? About yourself? About the other person? Can you

replay the situation and find an alternative ending?

Social issues are usua... deep concern, particularly to

teenagers. New social relationships and situations can be enacted

and explored in a safe and supportive environment where concerns are

shared    i. This will help students gain confidence and spare them

much discomfort in real life situations. Problems such as:  selecting

your guests for a party, taking our girlfriend out for a meal,

resolving disputes with parents, and so on can be dealt  with in a

role-playing setting. The outcome may be that the participant

learns more appropriate social behaviors.

Injoyment in Learning can be stimulated through enactment of topics

in               ...il Studies and Literature. An issue might be

presen   as .    ction: "What is involved in making a decision if

you are the head of a state or country? How do you feel about being

responsible for the fate of thousands of people?". Perhaps a

description of a situation will spark a role-playing activity: "You

have read about skyjackings in the newspaper. Enact such an event.

Discuss the feelings and thoughts of the people involved in such a

situation." Another is e might be the actions of Arab terrorists

and the decision of the Austrian government to give in to their demands. Such a situation might be enacted from various points of view and be contrived to lead to different endings.

Reading and the enjoyment of literature can be greatly enhanced by the use of role-playing. A teacher might choose to enact a story read in class. The story of Romeo and Juliet can be a departure point to explore such problems as inter-racial or inter-faith marriages, or parental disapproval of their childrens' friends. The result may be that children will find their reading more enjoyable and meaningful.

Role-playing may enrich and enliven any reading activity. Depending on the age and ability of the children, the nature of the reading material, and the specific educational goal, the teacher may choose to simply have the children role-play the characters and enact the situation. Or he may translate the conflict or problem into a situation which is familiar to the children. The role-playing session may precede or follow the reading experience, depending on the specific needs of the children and the goals of the teacher.

It is hoped that the suggestions and examples presented here will encourage teachers to utilize role-playing activities in their classrooms. A list of basic readings is included here to help the interested teacher get started. Yes, it can be a risky venture but it is a risk worth taking if one is committed to an instructional approach in which acceptance and understanding of each individual's uniqueness are guiding principles.

# SUGGESTED READINGS

Barnes, Douglas. "Drama in the English Classroom," National Council of Teachers of English, Illinois, 1968.

This discussion, based on work done at the Anglo-American Seminar on the Teaching of English held at Dartmouth College in 1966, places drama and dramatic experiences within an overall conception of the activities of the English classroom. It assumes that the central task of the English lesson is to help the pupil use his native language to deal with his experience both as an individual and as a participant in groups.

Chesler, Mark and Fox, Robert. "Role-playing Methods in the Classroom," Science Research Associates Inc., Chicago, 1966.

This booklet discusses the theoretical background of role-playing and gives a step-by-step discussion of how to use role-playing in the classroom. There are sample role-playing situations; suggestions on how to get started; advice on when to be cautious; discussions of the appropriateness of role-playing for children of various ages and backgrounds; and case studies of groups of teachers and students using role-playing under a variety of circumstances and for a variety of reasons.

Haggerty, Joan. Please Miss, Can I Play God?, Methuen and Company, London, 1966.

Miss Haggerty describes her experience using drama with British slum children and shows how, in spite of many difficulties, the mob of dirty children slowly learn to discipline themselves through their involvement with "making plays". Written with warmth, compassion and deep sincerity in a very enjoyable style.

Shaftel, F R. and Shaftel, G. Role-playing for Social Values, Prentice-Hall, Inc Englewood Cliffs, N.J., 1967.

This book concentrates on the use of role-playing to explore group behavior and the dilemmas of the child as he searches for his identity and personal values. A series of story situations are included together with suggestions on how to utilize them for role-playing purposes. The stories purposely deal with typical dilemmas of childhood and early adolesce. ce.

Way, Brian. Development Through Drama, Longmans, London, 1967.

The book discusses both theoretical and practical issues with regard to the use of dramatic methods to facilitate an education which concerns itself with the fullest possible development of the whole person. Full of good ideas and very specific practical suggestions. A valuable resource book.

LISTENING AND THE CLASSROOM TEACHER

R. Vance Peavy

University of Victoria

Nearly all studies of usage ratios between written and oral

communication show listening to be the most important, in quantitative

terms, of the four basic communication processes: reading, writing,

speaking, and listening. The average adult spends about 45% of his

waking time in listening activities while talking, reading, and writing

take 30%, 16% and 9% respectively. The two adult activities which

are most used in daily living--speaking and listening--get very little

systematic attention in school. Most speech experience is extra-

curricular or given meagre attention in language arts or literature

and writing courses. Listening education is even more scarce. Music

teachers, language arts teachers, and the occasional teacher who is a

model of good listening provide most of the listening instruction

in schools. Dr. Harry Goldman concluded an impressive study at

Columbia University with the remarks:

> In our society, reading and listening constitute the basic tools
> of learning as well as the prime media of social intercourse ...
> In the fulfillment of these roles, the importance of reading has
> never been questioned. Recently,...listening is receiving
> increased attention.

Why has listening received so little attention in formal education?

Certain false assumptions which have been widely held in educational

circles have operated to obscure the importance of listening training.

Five of these false assumptions are:

1. Listening is largely a matter of intelligence. There is a

relationship between listening and measures of intelligence.

However, when language factors are controlled, the correlation

is limited, to say the least.  Listening score correlation

coefficients range from .36 with the group intelligence scores down

to .22 with the use of individual intelligence tests.  Coefficients of

this low order suggest a weak relationship between listening and

academic intelligence.  Further, it is not uncommon to find individuals

of high intelligence with extremely poor listening skills.

2. .Listening is based on hearing acuity.  While a minimum of

physiological hearing is necessary for listening, the facts are that

only 3 to 6% of the school population suffers sufficient hearing loss

to impair classroom learning.  Low listening skills afflect about 95%

of the school population.

3. We practice listening every day so that we don't need formal

training in listening.  Studies point out that we practice and reinforce

faults in listening more than listening skills.  Variation in listening

comprehension in the school classroom is at least as variable as reading

comprehension.  Developing listening skills is a curriculum problem a

lear  and a teaching problem.

4.  to read an indivi  y to listen.
The best way to learn a skill is direct practice in that skill.  "Good

listening habits are taught, not caught."

5.  Learning to read is more important than learning to listen.
This is a widely held assumption and probably the most significant

and detrimental false assumption of the five I have listed.  Virtually

all interpersonal living--family living, friendships, work relationships,

and professional conduct such as teaching, social work, religion, and recreational activities, are based primarily on listening. Further, important political actions such as voting are based on opinions derived from radio and television listening rather than reading. Children gain virtually all of their political, economic, and religious beliefs by listening to television and to the adults around them. Peer group psychology and adolescent development is based on person-to-person talking and listening.

Careful reading of the literature on listening tells us that many factors outside of intelligence determine listening performance; and that we are much more significantly influenced by what we listen to than what we say, read or write.

We might as well face the fact that every teacher is a teacher of listening. Many teachers teach more listening faults than listening skills. What teachers need is not blame for overlooking systematic teaching of helpful listening skills or blame for teaching faulty listening habits; they need training for themselves in the art and science of listening.

Probably the most effective method we have for the teaching of effective listening skills is to be good listeners ourselves. No teacher just naturally becomes a good listener. Listening is learned. Just consider the act of asking a question of a child in the classroom. Do we really carefully listen to the child's answers—or do we just check to see if he gave us back what we wanted? A teacher rarely

asks a question in the classroom for which she does not have an answer.
This is precisely what she has been taught to do. Actually, the
practice of asking children questions for which we have predetermined
answers is a method of showing the ignorance of the one being asked.
Teachers must recognize that communication is a two-way process.
Careful classroom listeners are patient and they allow sufficient time to
listen together.

A classroom listening atmosphere is free of emotional tensions
and aggresiveness and it combines enthusiasm with an unhurriedness.
Competitive activities reduce the possibilities for listening. Seats
in rows are not conducive to listening--small groups are. Listening
corners with materials children want to listen to, and discuss, are
needed to encourage a listening-sharing-learning process.

Classroom listening experience should encompass a wide range of
experiences. Children like to listen to distant sounds in the street,
to footsteps in the hall, to sounds of their own bodies and to sounds
made by various objects. They like to listen to improve of sounds.
They listen to music, especially if they are alle a 1       to some
music of their own choosing. They like to            . . . s--
especially if they are given improvising, role-playing, or dramatic
variations to play with in the realm of human voice.

Many children respond to speech listening activities such as reading
and listening to one's own poetry, making speeches and reacting to
speeches on the basis of what has been heard.

Basic tool for listening. A basic took for listening is feedback.

Feedback is the process of returning a person's message to him so that

he knows that you understand (or don't). Feedback messages typically ·

begin with such statements as: "What I hear you saying is...",

"The message I'm getting from you is....", "What I understand is....."

Feedback is not evaluation. Feedback does not judge. Feedback does

not correct. Feedback does let the other person know (a) that you are

listening to him, and (b) just what message you got from him.

Feedback example:

During gym, a boy refused to jump into the water. "The water is

too cold, and I don't feel well."

Teacher feedback reply: "You don't feel well and the water seems

cold. You wish you didn't have to jump into the water today."

Non-feedback reply:

"The water is fine. You are the one who is all wet. You've just

got cold feet--next thing you'll probably be crying like a baby. Around

here the rule is in the pool or down to the principal's office."

The feedback reply communicates respect and acceptance of the

message. Resistance is diminished. The boy's message is taken seriously

and he is not blamed nor attacked.

An example of request for feedback:

Teacher: "O.K., Bluebirds, please open your notebooks to exercise

24 and do part two on a piece of scrap paper--check with me before

going to part three. Susan, I'd like you to tell me what you heard

me say."

In this example the teacher is asking for feedback. She is asking

Susan to give back her message on instructions.

In the classroom, a teacher can take a number of steps to promote listening by using feedback herself and teaching children to use feedback.

Step 1. Let children know that you want feedback. Unless this can be conveyed in a genuine way children will not respond. A teacher who requests feedback on her performance, on her own communication, even on her person, must be prepared for children's responses. For a child to give feedback he must know that he will not be criticized, debated with, attacked or ridiculed for giving feedback.

Step 2. Identify what you want feedback on. Receiving feedback on instructions is one thing. Getting feedback on how your voice sounds is another. Indiscriminate feedback often deteriorates into complaining, personal grievance-giving or idle talk.

Step 3. General classroom feedback sessions should be planned. Impulsive group feedback sessions which involve many or all of the children in a classroom are not as effective as sessions which are regularly scheduled and prepared for. Both children and teacher need to agree on which main aspects of classroom activity are to receive feedback. Feedback is always from person to person. However, in a classroom many children may want to give (and receive) feedback on the same topic.

Step 4. Encourage feedback by using silence and by using verbal encouragement. If a teacher wants a child to react she must be willing to show patience and remain silent. Sometimes gentle, encouraging

words such as "yes," "have you other thoughts," etc., will encourage the other person to react with feedback.

Step 5. A skilled feedback-user pays close attention to non-verbal replies. "He smiled with his teeth but not with his eyes." We often react to another's messages with gesture, posture and movement.

Step 6. Ask open-ended and clarifying questions while avoiding "fact" oriented questions and "Perry Mason" quizzing. Stop asking "Why?". "Why" questions put the other person on the defensive--they lead to justification, explanations and rationalization. They do not elicit feedback. Instead try to use "What?" questions: "What are your thoughts?" "What I understand is....Is that what you mean?" and "How?" questions, "How do you mean", "How does that work?", "How I hear that is...."

Step 7. Use statements that encourage feedback. "Can you say more about that?", "You feel that...", "What I understand is...."

Step 8. Reward feedback. Express your appreciation. Point out how feedback helps you. Give feedback to individual children--this tells each child that you are listening to him, that you value understanding, and that you are involved in what has importance to him. Accurate feedback promotes active listening.

Listening serves two fundamental purposes. The first is to secure information. Listening tells us what is going on or how something is happening. It is estimated that 98% of our information comes to us through our ears and our eyes. When we listen to a person,

we usually also look at him.  Thus intense listening includes looking.
A great deal of classroom listening is the receiving of information.

The second primary goal of listening is that listening provides
emotional health and well-being.  To be really listened to is to be
healed.  Almost all therapeutic practice rests on deep listening.
4400 years ago Ptahhopet, a pharaoh, instructed his staff thusly:

> An official who must listen to the pleas of his clients should
> listen patiently and without rancor, because a petitioner wants
> attention to what he says even more than the accomplishing of
> that for which he came.

Modern workers in human relations know that when an individual has one
friend who will patiently and non-judgingly listen to him say just what
it is that concerns, puzzles or troubles him, then his whole outlook
on the world can find relief and take a turn towards health.

The children of a classroom (and the teachers in a school) are
social beings.  Their daily lives are influenced by emotional conflict,
misunderstanding, fears, hopes and needs to be loved and accepted.
Therefore therapeutic listening should not be missing in a school.
Moreover both children and staff benefit from careful, non-evaluative
listening.  A few guidelines which help us in therapeutic listening are:

1.  Be quick to spot a "troubled" person.  Unusual quietness,
loud laughing, tears, unruliness, looks of deep sadness, behaving in
distracted fashion, inability to respond--all are signs that careful
listening is called for.  Our first thought here is to provide án open
and empathetic ear.

2.  Pay attention.  Listen to the person, look at the person, try
to hear completely and accurately just what he is saying.  Don't allow

yourself to become "infected" with strong emotions such as anger, sadness, bitterness, but let them flow by and catch the message of the other person.

3. Confine yourself to three types of response: (a) encouraging sounds such as "yes," "I see," "Uh-huh," "oh", (b) silence and head-nodding--try patient silence, "thoughtful head nods," keeping a receptive posture and attentive face and gaze, (c) feed-back to the person what you hear him saying. By paraphrasing or reflecting, give the person back the message which you get from him.

4. Do not quiz or probe for more facts. Therapeutic listening is not aimed at getting additional information. It is aimed at accepting feelings, clarifying and understanding. Inquisitive questions communicate to the other person that "I am curious." What is needed is the communication that, "I am listening and understanding," not "I am curious."

5. Refrain from evaluating what the speaker says. No matter how peculiar or unfitting the speaker's words seem to you, it is imperative that you as listener suspend your judgment and keep from passing a moral evaluation. In no case should the listener give advice even when advice is asked for. In the case where a listener feels compelled to give his opinion, every effort should be made to make clear that it is just that: his opinion. One person's opinion does not necessarily fit any other person's frame of mind or predicament.

6. Finally, the therapeutic listener keeps faith in the speaker's ability to solve his own problem. By listening, one person provides another person with personal working space within which he can gain perspectives, wrestle with his dilemmas, and grow toward solutions. It is extremely important to remember that the listener provides

- 156 -

<u>listening</u>. Careful, patient listening is the core of human caring, responsiveness, healing and respect.

I have done a bit of informal research into what characteristics school children find most distasteful in their adult listeners. Briefly, these are:

1. <u>Condescension</u>. The teacher talks and listens "down" to the student. "The teacher hears my first few sentences and tells me what is wrong with what I think or what I'm doing." "Makes me feel that I'm the stupidest kid in the world." "Tells me I'll know better when I'm older."

2. <u>Interruptions</u>. "The teacher asks me what I think--just as soon as I get started she interrupts me." "I want to be listened to, not lectured to."

3. <u>Substitutions</u>. The teacher, rather than listening to the child tells him that he should be thinking or doing something else. "When I get into the communication game with my teacher, I feel like he sends in the substitute team every time 1 get started. I never get to follow up what I really want to talk about. I end up having to follow his lead." "He is always telling me about his own experiences."

4. <u>Conditional receptivity</u>. "My teacher is pleasant and listens until I bring up something he hasn't thought of or doesn't want to talk about. Then he switches on the nasties--our conversation can flip from pleasant to unpleasant just like that." "If I'm not going to buy his product then his listening switches right off."

5. <u>Phony attitude</u>. "When my teacher is listening, if I start talking about something he doesn't know much about, he pretends to know

all about it. Right then I know that he isn't listening--he's just on a status trip." "Often in class a kid is talking and the teacher is listening. Suddenly the teacher breaks in and corrects or tops the kid--she is always pretending to know more than she really does."

On the other hand there are certain characteristics of the teacher-listener that many children and adolescents like:

1. The teacher recognizes that I have a problem, and is eager to listen even if he can't do anything about my problem;

2. He remembers me and recognizes me as a person--not just one of those knotheads.

3. He listens--he doesn't pressure me--he isn't always on the run, looking at his watch, shuffling papers, being impatient;

4. He is friendly, seems glad to see me--he will listen to me just talk without giving me advice or correcting me;

5. He asks me questions that help me think about things I hadn't thought about before. I don't feel quizzed by his questions--he actually seems interested in me.

## CONCLUSION

My experience of fifteen years in education and therapy has taught me that listening is the closest thing to magic which we humans have. Many of us have not learned effective listening skills. For this deficiency we should not be blamed, rather we should be trained. I truly believe that the teacher who learns to use the basic tool of feedback both in informational and therapeutic communication will have taken a great step toward listening effectiveness.

There are many sub-skills which together constitute careful listening. To learn these we need supervised practice. I am in the business of educating for listening. I have little faith that what I write or what others write <u>about</u> listening will bring on any great changes in <u>listening behavior</u>. I believe that teachers, principals, parents who actively participate in Workshop or "doing" learning can radically improve their listening skills. To develop listening skill means both to unlearn faulty habits and to acquire new, effective behaviors. To do this we need the help (feedback, mainly) of like-minded persons who are receptive to learning by doing.

To me one of the greatest benefits to be gained by improving one's own listening skills is that one becomes a healthy model for young, imitative learners. In this sense, one's life becomes a constant source of healing and growth for others. I will close with an actual poem written by a student who appreciated his teacher-listener:

### A POEM TO A TEACHER*

I cannot write poetry, yet how else
   can I tell.
How tell of this man among men--
   not tall, not fair;
Bringing no gifts, speaking no harsh
   words.
How tell of the miracle he wrought:
   the loosening of the cords binding
   my soul, the cutting of the
   strings which draw tight the
   shutters of my mind.
How else can I tell you of his
   listening heart.

*Taken from: Ginott, H. <u>Teacher and Child</u>. New York: The Macmillan Company, 1972, p. 316.

- 159 -

# INDIVIDUALIZED READING: THE FIRST SIX MONTHS

Theodore A. Mork

Western Washington State College

Active pupil involvement. Constant striving toward individual productivity in reading and language. Careful, continuous, cooperative planning and evaluation. That's the first six months of an Individualized Reading Program.

I have been asked often where and how I would begin in setting up an Individualized Reading Program. Let me start by saying that there is no single way for every Individualized Reading Program to begin, since not every program is identical nor does every teacher operate in the same way. (It has often interested me that we teach prospective and in-service teachers about individual differences in children and that we must accommodate those differences, and then we close our eyes to the notion of individual differences as they might exist in teachers, and expect them all to teach the same way.)

I am saying that Individualized Reading Programs may differ from teacher to teacher. However, in Individualized Reading Programs there should be several elements in common. Stating those elements will clarify my view of what Individualized Reading (IR) is or is not and will provide a common understanding of the program we went to begin.

First of all, IR is not necessarily one-to-one teaching. It may
be, but it must go beyond that. Obviously, there are many activities
or learning experiences from which many or all children in a given
class can profit. To try to teach the same specific skill one-at-a-
time to several children who are about equally ready for it is grossly
inefficient, and hardly defensible. IR includes whole-class teaching and
small-group teaching as well as one-to-one teaching.

Second, whether the teaching is large-group or one-to-one, there is
a strong element of self-selection. Reading material is chosen by the
child, although occasionally with some assistance from the teacher to
help improve the ability to make wise choices. In group discussion, as
well as in one-to-one situations the element of choice and self-
selection is evidenced in the child's responses. In other words, we
are talking about a situation in which the teacher's questioning is open
ended, so there is seldom a single "right" answer. Instead, 'any
honestly offered answer is accepted. Some are refined._ Some later
rejected for various specific reasons. Others are offered. The child
is given the opportunity to respond as an individual. He learns that
his idea is as acceptable as anyone else's. I'll have to clarify this
point later. Suffice it to say here, that IR rests strongly on self-
selection of reading material, of responses in group discussions, and of
responses given individually in writing.

Third, Individualized Reading includes periods of sharing in which
children share, under teacher direction, certain of their books and what
they have done as activities with their books.

Fourth, the majority of word attack skills and comprehension skills are taught briefly and then practiced extensively in children's silent reading, in writing, and in conferences and whole-class discussions.

Fifth, small groups of children are formed for specific purposes, such as a specific skill-need, a common interest, or a mutual desire to work together. When the purpose of the group has been met, it is disbanded. Never would one group of children remain in the same group for months at a time.

By now it should be clear that I am not talking about any of the prescribed, ready-made programs into which I can insert a child based on some test or placement inventory, and then let the program take responsibility for what the child does next. That's the responsibility of the teacher along with the child.

While this sketch can hardly be considered complete, it provides a common frame of reference from which we can now proceed to a discussion of the beginning steps in establishing an Individualized Reading Program. What's needed? Active pupil involvement. A striving toward individual productivity in reading and language. Careful, continuous, cooperative planning and evaluation.

One way of developing active pupil involvement is for the teacher to provide some sort of input, then expect the children to respond. One of my favorite techniques is to read part or all of a book to the class and then help the children to respond with their own thinking. Sometimes this can take the form of setting a problem situation and having children offer possible solutions. I have used The Peasant's Pea Patch

(a Russian folktale translated by Guy Daniels, New York: Delacorte
Press, 1971) with adults and had them respond the same way children do.
The tale begins

> A certain peasant once planted a big patch of peas. The
> peas grew wondrously well, but just when he was about to
> harvest them, a flock of cranes came flying along, swooped
> down, and began to gobble them up.
>
> "Just you wait!" the peasant thought. "I'll fix you!"

My question to the group is "How will he fix the cranes? What
might he do?" The answers coming from the group include: "Shoot them,"
"Use a net," "Make a scarecrow (scarecrane)," "Trap them." While the
individuals are responding I am writing on the chalkboard.

My next step is to ask questions about one or more of the ideas.
"Why a scarecrow? What will I want the scarecrow to do (or look like)?
What will we have to do in building the scarecrow? Will we want it to
make noise?" This is a whole-group activity. Part of my intent is to
push the participants (children or adults) to think further than they
have previously thought. After we have developed quite fully one or
more of the possible solutions, I have the participants take the part of
the author. I re-read that first paragraph, and give them the charge
to write their stories. (Young children may do no more than draw
their solutions and dictate their stories to be recorded right on their
pictures.) We share some of the stories. (Occasionally I have to share
mine first to get it started.) Invariably the participants (children or
adults) want to know the "book" solution, and often those offered by
children are liked better than the original author's idea. That's not
generally the case with adults and The Peasant's Pea Patch which goes on:

He got a pail of vodka, poured it into a trough and mixed
some honey in with it....

Another approach is to use a book that establishes a certain pattern
and have children try to emulate the pattern. A book of this type that
I have used many times with children, which has resulted in active
pupil involvement, is Remy Charlip's Fortunately (New York: Scholastic,
1964). This is a delightful book which establishes a pattern.
"Fortunately, ...a friend lent him an airplane. Unfortunately the motor
exploded. Fortunately there was a parachute in the airplane. Unfortunately
there was a hole in the parachute. Fortunately..." All you need is a
starting line and the children as a group can put together a "fortunately
...unfortunately" story. The next step I use is the writing of
individual "fortunately - unfortunately" stories and the subsequent
sharing and discussing of the stories. The responses are individual. The
learning is individualized.

The writing becomes individual seatwork. It holds purpose for
children. Children enjoy it. To a large extent it replaces workbook
activities and other contrived seatwork. It might be important to point
out that this writing places considerable emphasis on practice in phoneme-
grapheme associations.

This same kind of active child involvement can be achieved through
group discussion based on themes and using frames as described by Bob
and Marlene McCracken in the book Reading Is Only the Tiger's Tail
(San Rafael, California: Leswing Press, 1972).

A second type of activity which tends to develop active pupil involvement is SSR, Sustained Silent Reading (Hunt, McCracken, Mork). SSR is a time during the school day when the only acceptable behavior in the classroom is silent reading. Everyone reads. Teacher included. Each reader selects a book he wants to read. He is not allowed to interrupt anyone else. "Silently get as many ideas from your book as you can."

Following the reading, sharing is voluntary. When the teacher shares with the children a part of his book, the children gradually begin to share ideas from theirs. Here is an excellent opportunity for the teacher to help extend the child's comprehension (note I said "extend," not "check on"). It also provides an opportunity to involve other children in the learning situation by asking questions of those who have listened to the one child's sharing.

So far I have emphasized three types of activities, all which help to develop active pupil involvement, 1) Reading to the children and leading them to individual writing, 2) Sustained Silent Reading, and 3) Sharing and subsequent exploring of ideas children get from their books.

One other aspect of Individualized Reading should be emphasized, i.e., the independent work period. This is merely a period of time during which children are working on their various activities (generally self-chosen) in relation to the book(s) they have been reading. This can also be the time when ost or all of the children are working on the writing or individual responding that has been introduced by the teacher. While

children are doing their independent seatwork, the teacher is generally

working with one child and then another on specific skills. These may

include helping a child clarify the ideas he wants to write down or it

might include some brief teaching or reteaching on the formation of a

certain letter. (It should be pointed out, however, that ideas get

first emphasis here. Mechanics, while important, must be relegated to

a secondary position.)

The expectation is that all children will be actively involved in

the various parts. Individual productivity and involvement become

extremely important. It becomes a central concern in the regular

planning and evaluation that takes place right from the start and that

continues throughout the program. Perhaps questions to be asked of

children will help to clarify this point.

Prior to an independent work period: "Is there anyone who does not

know what he is going to do first during the Independent Work Period?

What are you going to do, Tommy? Mary? Louise? Do you also know what

you're going to do after you finish with that activity? What are the

activities you can choose from?"

During, or at the conclusion of the Independent Work Period: "Did

you get a lot of good, worthwhile work done during this period? Was it

a productive period for you? Were you able to keep your mind on what you

were doing? Were there things that got in your way and kept you from

being productive? What were they? What can we do about them?"

These are only a few examples of questions that can be asked of

children. Obviously, the intent is to make the child aware that his

progress is his business as much as the teachers.  The child has
to be accountable, too.

This planning and evaluation are not one-time endeavors.  They
take place repeatedly.  Every day.  Sometimes several times a day.
The teacher takes the children's work seriously, and expects  children
to do the same.  As the teacher deals with individual children she works
toward getting specific commitments from them.  When she asks the child
what he's going to be working on and the child responds, there is a
definite commitment.  Children are like adults in that if they have made
a definite commitment, they generally feel obligated to follow through on
that commitment, whereas if the commitment is vague and ill defined,
there is little likelihood that it will be honored.

Children need help in learning to plan and to evaluate.  The only
way they learn to do this is by being involved in these activities.
We can help them plan and evaluate by asking them questions that will
force them to think about their learning and their behavior.  If we
expect them to do this, they do.  The more we expect them to help plan
and evaluate, the better they get at it.

Now let's ask our initial question again:  How does one get started
with an Individualized Reading Program?  One easy way to begin is with
daily periods of Sustained Silent Reading.  Each child needs a book he
wants to read and that he can read.  Start with about five minutes of
Sustained Silent Reading without any interruptions.  Gradually increase
this to ten minutes and then fifteen, up to as much as half an hour a day
(regardless of grade level).

The reading of (getting ideas from) books quite naturally leads to talking about books and sharing ideas from books. This can lead naturally to further exploration of ideas related to books and then to writing in relation to books. The writing, or the drawing, or the doing in relation to the ideas in books leads naturally to more talking about books, sharing the writing, drawing, etc., either with the class or with the teacher in a private conference. Based on specific needs of children as recognized by the teacher, various specific skills are taught (introduced or retaught). Throughout all of these activities or "parts" of Individualized Reading, the overriding factor that can lead to success is the continuous cooperative planning and evaluation always directed toward active student involvement and individual productivity.

## REFERENCES

Hunt, Lyman C., Jr.  "Six Steps to the Individualized Reading Program
 (IRP)."  Elementary English, January, 1971, pp. 27-32.

McCracken, Robert A. and Marlene J.  Reading Is Only the Tiger's Tail.
 San Rafael, California:  Leswing Press, 1972, pp. 151-154.

Mork, Theodore A.  "Sustained Silent Reading in the Classroom,"
 The Reading Teacher, February, 1972, pp. 438-441.

# THE TEACHING OF POETRY: PROBLEMS AND PRINCIPLES

Bryan N.S. Gooch

University of Victoria

There is no question that the teaching of poetry can present
many problems for the instructor.  There is also no question that the
teaching of poetry has often created many problems for the student.
While there may seem to be two sets of difficulties here, the truth is
that the sets are connected absolutely because of the very nature of
the subject and because, for me at least, it seems intellectually and
pedagogically hazardous to separate problems of students from problems
of teachers.  To make the latter separation, of course, is to indicate
that what the teacher does has nothing to do with what the student does,
and possibly there are those amongst us who, in fatigue and exasperation,
would take that position and would speak of the "realities" -- whatever
those are -- of the classroom situation.  Better it is, though, always
to keep in mind, despite the fatigue and the exasperation, what can be
achieved, what is to be done, what knowledge is to be obtained, what
beauty is to be beheld, and what truth, ultimately, may be revealed.  The
teacher who loses his ideals loses surely the very motivation for good
teaching; indeed, he may lose something of himself in the process.  It is
in fact the fatigue and exasperation which can drive one  again to seek
the ideals, to come to grips again with the theory, and it is, in part,
fatigue and exasperation, caused by the fact that so many students have

been "put off" poetry, which determines the focus of my discussion in
this paper.

What is presented is, as the title of this discussion suggests, a
concentration on the problems and a reaffirmation of the principles
related to the teaching of poetry. The focus is a personal one, and
the ideas set forth are not the result of laborious searches in the
catacombs of one or more impressive libraries -- I am reminded that
King George the Fifth is said once to have referred to the Cambridge
Library, because of its appearance, naturally, as a "powerhouse of
learning" -- but, rather, the ideas are the result of many hours spent
with university students as they have tried to come to grips with the
mysteries of an art form they have frequently misunderstood, not
understood, or even actively disliked. My own fatigue and exasper-
ation arise from finding year after year such prevalent attitudes in
students; and my feelings grow somewhat as I find that the students'
difficulties and dismay can be mended. And if the mending can take
place when the students reach the university, it can take place earlier;
indeed, in many instances I am certain the "disrepair" need not be necessary.
What is given now, then, is given in the hope that certain notions
will in some instances at least help to minimise the harm which can be
done to the attitude of young people to poetry. What is given is in
line with Samuel Johnson's pleasure in the portrayal of general nature
in general terms. I propose no panacea, for idealist though I may be I
can work no magic. Rather, with Robert Frost, it seems wiser to say that

```
    ...all the precedent is on my side:
    I know that winter death has never tried
    The earth but it has failed:  the snow may heap
    In long storms an updrifted four feet deep
    As measured against maple, birch, and oak,
    It cannot check the peeper's silver croak;
    And I shall see the snow all go down hill
    In water of a slender April rill
    That flashes tail through last year's withered brake
    And dead weeds,  like a disappearing snake.  1
```

As the snows can disappear, so, for many students, can the problems.

It is not to be expected, certainly, that provided the problems can be

identified and with the aid of principles (to be annunciated later

on the assumption that the best part should always come at the end) be

cast into outer darkness all students will like -- let alone admire --

poetry; it is also not to be expected that all students have difficulty

in coping with poetry in the first place.  And having made clear that

universality lies neither on the side of youthful perception and

artistic sensibility nor on the side of immature doltishness and

insensitivity, let me turn to look at some of the problems with this

caveat:  I suggest to you again that students' difficulties go hand in

hand with those of the teacher.

One of the evident symptoms is dislike of poetry, that is, dislike

which may range from that which is frankly admitted and may amount to

hostility to any literature which remotely affects verse form to dislike

which is muted but which is sufficient to deter the student from paying

much attention to material for study and from picking up a volume of

poetry for voluntary reading, and to dislike which may be even quieter

and may prompt the student to say to himself:  "I suppose I don't mind

learning this stuff, but I'd rather do...;" well, the student might

rather do a good many things than read poetry required for an English class. This wide range of dislike, often evident in students entering university, is clearly present in the secondary school grades and even in lower levels.

Many students entering university confess that they "do not like" poetry; and there seem to be more students with antipathy to poetry than there are with a dislike of drama, short stories, and novels. The university students who are prepared to admit that they "do not like" poetry may view the art form, for example, as irrelevant in terms of subject matter and/or form, as affected, as silly. What may bother some students will be the form and technique, and they may say of poems that "normal people don't talk like that." Others may find that the very appearance of a poem on a page elicits a sufficiently high negative reaction to ensure that the subject will not be properly considered. Still others are convinced that poems have nothing to do with life and that the whole process of poetic creation has been brewed in some fairy glen with the aid of elves and assorted imbeciles. And others more paranoic are certain not only of the brewing of the ridiculous and poisonous concoction, but would feel that the chemistry has been initiated for their especial torture and that the result is a hideous intellectual and emotional nausea brought on with glee by that somewhat superior executioner, the English teacher. Consciousness of form grows as students gain maturity; importance of subject matter also increases, and so the possibility of damage to attitude -- the potential for continuing dislike -- becomes greater, and by the time students reach secondary school, feelings, to put it simply, are vulnerable.

Only a few wrong moves on the part of a teacher will be needed to put

some students off. Some lucky ones, as I have already pointed out, will

not be put off; others far less fortunate, as the _literati_ would have

it, will never be "turned on." But if the teacher can encourage and

assist the "naturals" and bring along the middle group -- and here I

speak with no specific reference to grade level -- he will have accom-

plished much.

Frequently what lies behind the dislike of poetry -- and, again,

one needs to think of the range of negative attitude indicated earlier --

is, quite simply, a lack of understanding. Marianne Moore in "Poetry"

notes accurately enough that

                                          ...we
do not admire what
we cannot understand: the bat
   holding on upside down or in quest of something to

eat, elephants pushing, a wild horse taking a roll, a
   tireless wolf under
a tree, the immovable critic twitching his skin like a
   horse that feels a flea, the base-
ball fan, the statistician --
   nor is it valid
    to discriminate against 'business documents and
school books'; all these phenomena are important. 2

Lack of understanding may involve difficulty and misconception over

form, technique, subject, or more than one of these, for example, and

such a lack will not only inhibit any reasonable discrimination with

respect to style, but will also, at times, lead to contempt, though,

as we have been warned often enough -- even, again, by T.S. Eliot who,

of course, has warned us of most things but chiefly of ourselves --

people tend to be contemptuous of that which is understood too easily,

and Eliot noted that they are exasperated by what they do not understand.

In any event, dislike is the result. The result, then, is obvious;

the direct cause of that result is less obvious -- less voiced and, of course, less recognised by the student himself.

However, lack of understanding has its own causes, and one of the major ones lies not in the matter of student ability per se but in the quality of teaching provided.

Too often there is a lack of explanation of the background of the subject and of the role that technique plays in the expression of that subject. Too often the biographical background of the poet -- at least insofar as it might affect the presentation of a subject -- is too slightly treated. Too often there is a lack of relaxed discussion, even in the earlier grades, about subject (including interpretation and variety of meaning) and style. And these deficiencies occur for many reasons; for example, the teacher may be tired, he may be too busy, he may himself neither like nor understand certain poetry, or his major area of academic study may not be English literature, and hence he may simply not be prepared to do an adequate job.

Even if the points just cited are not relevant to a particular situation, what may play a detrimental role is a lack of naturalness in the presentation of poetry, a lack of the sense that poetic expression is to some people as normal as the drawing of a breath and that there is nothing unapproachable or, to use another word, peculiar about the business of writing it or reading it and either way enjoying it. In many classrooms, as in many homes, poetry, if present, is an extra, a frill. It is not a part of every day life, but is a cultural extra, or an extra -- like a supply of books on hand -- which promises the blessing of culture; and again, in both cases, a student is likely to have the impression that

a little of that strange writing will go a long way.

Indeed, the lack of naturalness which may cause the student to minimise his efforts at comprehending poetry may also drive him into other activities which are seemingly more pleasant and in which he finds adequate reinforcement -- for example, in terms of sheer pleasure or approbation from his peers -- to support his view and enhance his notion that poetry is "wierd," "strange," "creepy," of just -- to use a word which is also, regrettably, a part of common parlance - "dumb."

And of course, if the teacher is in the same uninspired state as the poet who for years has been searching the telephone book for the number of "Dial-a-Muse," the student is quite unlikely to fare well.

Dislike and lack of understanding are clearly linked. Students tend to be more candid about their attitude than they are about what they feel to be their academic or artistic shortcomings. But it is the teacher who can and, by virtue of his office or his responsibility, must work to eliminate the problems, and certain principles may be of help to him in this task.

A discussion of certain principles -- maxims or general consider-ations -- now follows. A. Milton would have it:

    And, if it happen as I did forecast,
    The daintiest dishes shall be serv'd up last. [3]

And the daintiest dishes are the result of certain practical experience, of not a little trial and not a little error, and of a desire to attempt to communicate in the best way the joy and beauty of an art which has

become part of my life. Once again, however, there must be a caution:

I present no formula, but merely observations, and while most of these

on reflection, at least, would appear to be obvious, it must be

remembered also that what is thought to be obvious is often neglected

in the search for truth more hidden.

Of paramount importance for me is the notion that the teacher should

believe in and communicate the idea that poetry -- indeed all of art --

is a human function; that is, it is natural. He should explain that the

poet has something to say and that verse form is often a convenient

vehicle for the expression of the poet's feelings, that is, for the

verbalisation of that fusion of thought and feeling which is the essence

of all poetry. For the preface to a set of critical notes written to

accompany a recently published anthology of poetry I put forward certain

points which might be cited here:

> Poetry, like any other art, is what it is ---a fusion of
> thought and feeling which finds its expression through a
> particular medium. In the case of poetry the medium consists of
> words and verse form of some kind. The difficulty in definition
> lies in the description of the human element as it exists in
> the creation of a work of art and lies latent in the piece once
> creation has taken place. And it is precisely this human element
> which is not recognised or is not remembered by many who dismiss
> some if not all poetry as artificial or as bearing little if
> any relation to the way people think and talk. Poetry is an
> art, certainly, and art implies control, discipline, a selection
> and ordering of details. But the arts are human. And poetry,
> like the other arts, is for people.
>
> Control, discipline, a selection and ordering of details --- these
> aspects seem, casually considered to be in direct opposition to
> that which is usually considered to be human, sensitive,
> imaginative. Yet no great work can exist without humanity,
> sensitivity, and imagination, and these qualities which permeate it
> are merely condensed, as it were, made more strong, directed as
> light through a prism as the poet brings his technique to bear on
> the problem of explaining as clearly as possible what is on his
> mind and indicating how he feels about his subject. The poet, after
> all, has, presumably, something to say. Further, he wants to say it.

-177-

Beyond this still, he wants, normally, to be understood. Here
is the problem --- the poet must set out his ideas and feelings
in such a way that the reader can appreciate and understand them,
so that the reader can become, for a time, a visitor in the poet's
mind and world. This is not to say that one will necessarily
agree with the artist or even find all poems satisfying, let
alone congenial. But at least the successful poet will present
his experience to his audience in such a way that one will have some
sense of what it is like to be the poet thinking about this
or that.

There must be at all levels a constant and patient explanation of
the reason for the employment of poetic techniques, and that kind of
explanation can run from a simple examination of the effect of a whole
poem on the mood of the reader to the rather more sophisticated look at
the nuances present in the use of an image. It is not enough to point
out devices in those grades in which the students are experienced enough
to make distinctions between, say similes and metaphors. It is not
enough that a student gets a reasonable mark for prowess in identification
of those devices. What is important is that he has some growing ideas
that the poet has probably used alliteration or a simile for some good
reason, that the student develop his perceptions as to the reason, as
to the effect on the reader of this rhyme and of that device. Not to
show why structural devices are important, not to discuss the effect of
form or rhyme, not to show how these aspects are bound up with and
paradoxically give freedom to human expression is to make the study of
poetry a rather dull, technical process. It is to deny its nature; it
is to deny many students the willingness to know and to love the art.

But always the teacher must love poetry and indeed literature in
general -- not in any mawkish or calculated way, but genuinely, with a
sincerity which will ring true even in moments of extreme provocation.

He must never be a snob about his treasure, for young people seem to be

the most perceptive creatures on earth when it comes t, assessing the

genuineness of their seniors (and this, of course, many a beginning

teacher has learned with something of a shock).  Sincerity and patience

and a pleasure in explaining what might seem to be the most mundane

aspects of poetry -- and explaining them in a variety of ways -- these

are important qualities.  It may be quite necessary at certain levels to

look at poetry in a rather utilitarian way -- to answer the question

"What is it good for?"  And it will be frequently necessary to bear in

mind that many a student, for all the positive influence the instructor

can exert, may face contrary influences both inside and outside the

classroom; such contrary influences are often subtle, emotional,

difficult to measure, and difficult to combat.  One can recall with profit

the words of Roger Ascham, tutor to Queen Elizabeth I, in The Scholemaster:

> Let your Scholar be never afraide, to ask you any
> doubt, but use discretlie the best aliurementes ye can,
> to encorage him to the same:  lest, his overmoch fearinge
> of you drive him to seek some misorderlie shifte:  as, to seeke
> to be helped by some other booke, or to be prompted by some
> other Scholar, and so goe aboute to begile you moch, and
> him selfe more. 4

Just as the reason for the use of structures and technical devices

must be explained so must the imposition of memorisation.  Memorisation

must seem to be a reasonable requirement; if it does not seem reasonable,

the process may be disliked if not detested and so also may be the set

poem.  Too often students are made to memorise particular passages

without being told why the effort is worthwhile, why or how the selected

passages are significant. It may be that the teacher wants to train

memory per se; in that case he should say so and explain why he is

thus minded. The setting of memorisation of poetry as a punishment I

regard as a manifest evil, for all too frequently the poem and the

students' possible love for poetry are most punished, and if the former

is blameless the latter equally does not deserve torture. To make a

student dislike poetry is to accomplish nothing positive, not even if

the black figures were to show the consequent minimisation of youthful

crime.

It is also wise to remember that young people one way or another

want to be respected, and just as they tend not to respond well to

somewhat dreary tasks, so they will tend also not to respond too well to

the teacher who talks down to them, who meets them right on their level.

He must, I suggest, try always to aim at least a shade high. Normally

a mind enjoys being challenged, and there are few things more irritating

to a youth seeking maturity than being presented seriously with an overly-

simple text or with a seemingly patronising and overly-simple explanation.

A teacher often kills a lot of student joy and motivation if he talks

down.

Perhaps I might at this juncture recall an incident from my own

school years, for this can at least underscore the points just made.

One day when in a Grade VII library class I went to the librarian to

ask that a book I had almost finished reading might be renewed so that

I might take it home with me. The librarian looked at the book and,

without a word, went across the room, there to engage in earnest

conversation with my English teacher, who happened to be in attendance

also. Then both of them came towards me, looking at me, I recall, as if I had contracted some highly communicable disease or had grown a second head; the librarian spoke: "But really, you don't want to borrow this. It is a Grade IX book." I explained that I had read most of it and was finally duly allowed, though with some head-shaking on the part of both librarian and English teacher, to borrow the volume. That, of course, is only one incident, and, for me, there was not much that the librarian or the English teacher could do to dissuade me, but under certain conditions that precise set of attitudes could have devastating results with respect to a student's desire to learn and to be challenged.

"But now my Oat proceeds,"[5] and I am here on behalf of the encouragement and the preservation of young love for the craft of he

> Who vainly anguishes my breast,
> Provokes, allays, and with false terror fills,
> Like a magician, and now sets me down
> In Thebes, and now in Athens. 6

he who can create

> Short swallow-flights of song, that dip
> Their wings in tears, and skim away. 7

or he who can transport this reader on "...the viewless wings of Poesy ...."[8]

The teacher, like the poet is something of a creator, and he must have the courage and, of course, the imagination to achieve his goals by using, if necessary and suitable, various aids available to him, for example, pictures, radio, and even television. But the gimmicks must

never be an end in themselves, nor while they are in use must the process

of their employment command the focus of student attention. Hardware,

as I pointed out several years ago in a paper delivered in support

of the establishment of national educational television in Canada, is

not going to replace the software,[9] and the software must remain in

control. Used wisely, however, devices can be extraordinarily helpful,

and their presence in the learning process is in no way, despite the

clamour raised at times, demeaning or cheapening in the instruction of a

subject so often held in awe -- consider what Coleridge in Biographia

Literaria and Shelley in A Defence of Poetry, for example, have to say

about the nature of poetry. The gimmicks are valid if they can help

to make the student's imagination work and his perception grow. After

all, a blackboard is a gimmick -- it is hardware.

Another major principle is the development of a reading list suitable

to the class and, in general, to the level of the class. Often there

are set books or set lists to contend with, and these can be supplemented

with additional material; now, of course, there is growing freedom for

the individual teacher with respect to curriculum matters. I would urge

that teachers read new books, new anthologies, and that they seek,

whenever suitable, information from their Provincial Departments and

from university resource centres, faculty members, and publishers. It

is always well to remember, though, that poems written expressly for

the young may be patently less acceptable and successful, especially in

secondary-school classes, than they might have been fifteen years ago.

Each class has always had its few sophisticates who could spot a

"kiddies' poem" at twenty paces, but now, with the young aware of each

day's disasters according to the gospel of the viewed evening news,
there are more who will not be fed intellectual pablum in the morning
after the heady-brew of the previous evening hours in front of the box.
Nevertheless, it is possible to find a number of -- for want of a
better term -- adult poems suitable, particularly, for secondary school
grades.  If one should not talk down in one's discussion, one should
not talk down with one's reading list.

However, there is never any magic formula for developing, say, a
Grade VI reading list.  The recipe differs for each class, and again, the
"daintiest dishes" are prepared best with experience.  Similarly, the
recipe differs a little for each student.  He who proposes to "teach a
class poetry" is deluding himself.  It is possible to inspire most people
in a class, to make them aware that poetry is that fusion of thought
and feeling, the expression of the experience of a man now or once
alive in this world, but there will always be people who need help --
a comment, an explanation -- and the teacher should be prepared, like
Imlac, in every way, to give that help:

> ...the attention of Rasselas was particularly seized by
> a poem, which Imlac rehearsed, upon the various conditions
> of humanity. He commanded the poet to attend him in his
> apartment, and recite his verses a second time; then
> entering into familiar talk, he thought himself happy in
> having found a man who knew the world so well, and could
> so skillfully paint the scenes of life. He asked a
> thousand questions about things, to which, though common
> to all other mortals, his confinement from childhood had
> kept him a stranger.  The poet pitied his ignorance, and loved
> his curiosity, and entertained him from day to day   'h
> novelty and instruction, so that the prince regret    the
> necessity of sleep, and longed till the morning sh.,id
> renew his pleasure.  10

The teacher should learn to read well to his students and, it might be added, encourage his students to read aloud out of class as well as in it.

Certainly, there is no magic formula of principles to cover the general area of the teaching of poetry. What has been presented here is not a complete list; rather it is personal and for that reason implicitly selective. It is nevertheless presented with conviction and with the suggestion that if we say we are doing well at present we can all do better in the future. Poetry should be taught out of joy in the subject and not in spite of continual frustration, and no contrary view will really assist in the attainment of the desired end, namely, the development in students of a love for and understanding of poetry.

With that comment, which has to do with dedication to the welfare of the students as does, more obviously, my remark about the provision of individual assistance, I turn finally, as a reminder to us all, to the words of Dr. Johnson in his Idler Essay Number 88 (Saturday, 22 December 1759):

> Every man is obliged by the Supreme Master of the
> universe to improve all the opportunities of good which
> are afforded him, and to keep in continual activity
> such abilities as are bestowed upon him. But he has
> no reason to repine, though his abilities are small and
> his opportunities few. He that has improved the
> virtue or advanced the happiness of one fellow-creature,
> he that has ascertained a sing- moral proposition, or
> added one useful experiment to natural knowledge, may
> be contented with his own performance, and, with
> respect to mortals like himself, may demand, like
> Augustus, to be dismissed at his departure with applause. 11

FOOTNOTES

1    Robert Frost, "The Onset," Complete Poems of Robert Frost
(London, 1959), p. 252, ll. 12-21.

2    Marianne Moore, "Poetry," Collected Poems (New York, 1951),
p. 41, ll. 9-17.

3    John Milton, "At a Vacation Exercise in the Colledge ...,"
The Works of John Milton (New York, 1931), I, 19, ll. 13-14.

4    Roger Ascham, The Scholemaster, ed. John E.B. Mayor (London,
1863), p. 5.

5    John Milton, "Lycidas," Works, I, 79, l. 88.

6    William Temple, "Of Poetry," Five Miscellaneous Essays by Sir
William Temple, ed. Samuel Holt Monk (Ann Arbor, 1963), p. 183.

7    Alfred Lord Tennyson, "In Memoriam A.H.H.," The Works of Tennyson,
ed. Hallam, Lord Tennyson (London, 1908), III, 87, XLVIII, 15-16.

8    John Keats, "Ode to a Nightingale," The Poetical Works of John
Keats, ed. H.W. Garrod, 2nd ed. (Oxford, 1958), p. 258, l.33.

9    Bryan N.S. Gooch, "FTV and NET: Humanities and Mass Media,"
Humanities Association Bulletin, XX (Spring 1969), 37.

10    Samuel Johnson, The History of Rasselas, Prince of Abissinia,
The Works of Samuel Johnson, LL.D., ed. Alexander Chalmers
(London, 1823), V, 438.

11    Samuel Johnson, The Idler (No. 88, Saturday, 22 December 1759),
Works, V, 356.

THE CHANGE PROCESS AND TEACHER PREPARATION

K. George Pedersen

University of Victoria

It is an obvious truism to suggest that no institution or
organization is exempt from the change process. Even a function as
traditionally conservative as public education is beginning to show
evidence of some potentially interesting shifts and we have just had
the privilege of hearing about two important programatic changes which
are taking place at the Universities of Alberta and Minnesota. It is
my task now of trying to move, somehow inductively, from those
impressive but quite specific changes in the field of reading to a more
general discussion of the need for change in the area of teacher prepar-
ation. Assuming that some change is needed, and after all who could be
opposed to change, I am reasonably certain that there was an expectation
on the part of the chairman of the conference that I should, as a
minimum expectation, convince all of you that the University of Victoria
has found most of the answers to the important questions in the field of
professional education.

Since I have already had the audacity to inflict one truism on you,
let me hasten to show my true mettle by adding another. One area of

competence in which we all seem to have expertise concerns the ability

to identify changes in institutional patterns once they have occurred --

in other words, hindsight in the area of change is quite pervasive. It

is more difficult to analyze changes as they are taking place and

dramatically more difficult to predict changes or even to influence

significantly the direction and tempo of changes already under way.

Yet, increasingly, it has fallen to those who have managerial functions in

organizations to analyze and predict impending shifts and take deliberate

action to mold change according to some criteria of retrogression or

progress. The planning of change has become part of the responsibility

of management in all contemporary institutions, regardless of whether

the institution is defined in terms of social welfare, education,

religious indoctrination, health, or industrial production. In using

the term "management" as it relates to education, I am thinking of it

in the broadest sense as it applies to a multiplicity of roles, ranging

from classroom teacher to superintendent, or from lecturer to university

president.

In discussing a problem area, and surely teacher education qualifies

within that rubric, I always find it useful to try to identify some

form of guiding principle. For me at least, such a centralizing theme

need not be grandiose and in fact it is quite preferable that it be a

statement expressed simply. The underlying theme which I have used in

preparing these limited remarks, and actually the one which I have

employed myself in trying to intellectualize where we are as a Faculty

of Education might go, is far from novel -- stated in simple language it

is that teacher education is a process which begins with initial

training and terminates upon retirement from the profession. If those
of us responsible for the preparation of teachers, and by my definition
I am not confining my remarks now to university personnel, were to
take that simple statement seriously, it would undoubtedly have some
dramatic and perhaps even profound implications for the approaches
we should use in educating teachers. I would argue that this theme is
now accepted by all of us at some relatively abstract verbal level but
is rarely if ever operationalized.


## SOME BASIC PROBLEMS

Time does not allow me to discuss in any detail the basic problems
which appear to relate to the education of teachers but at least I would
like to identify them in passing. One problem of major consequence
is that teacher education is an extensive and complicated series of
operations, each of which in turn is made up of an extremely complex
set of steps. Any attempt to analyze the process reveals an incredible
mix of factors which must interact simultaneously. Presumably growing
out of this maze of interacting variables is the essence of the second
problem -- the almost total absence of rationality concerning our
preparatory programmes for teachers. The bulk of the programme offering
is much more the result of educational whim, pseudo-scientific reasoning,
or historical artifact.

A third area which is problematic relates to the static nature of
the teaching role. Careful analyses of classroom environments have
revealed that teacher behaviour has changed remarkably little in the

past fifty years and, furthermore, there are those critics who are quite prepared to argue that the term used should more properly be 300 years. This it seems to me is a serious indictment of the individuals we prepare for presumably the social environment has changed dramatically during the last half century and presumably is destined to undergo extensive revision in the years immediately ahead. Assuming that educators of teachers have done little to prepare their students for the teaching roles of the day, what evidence do we have that we will change this behaviour to satisfy future needs?

The present compartmentalization of the career of a teacher represents a fourth concern. Our fallacious division into pre-service and in-service phases illustrates our failure to think in terms of a total career-long programme of teacher education. Growing out of these four important problems is the desperate desire for legitimacy for the profession of education. In the university setting this often results in the desire to emulate more traditional faculties such as arts and science, frequently to the detriment of the professional thrust of our programmes. At the level of the practitioner, this same legitimacy syndrome is characterized by varied analogies and replications of the higher status professions such as law and medicine. Somehow, we always seem slightly embarrassed that our occupational designation is classified as teaching.

# THE UNIVERSITY SETTING

One of the means by which it was expected to elevate the teaching profession involved the placement of teacher education on university campuses. In many respects, this transition has been beneficial but there are also causes for concern. It is my own position that the total university community does not take its responsibility seriously enough and consequently the full benefit of the academic community is not being realized. Faculties or colleges of education simply do not have the full range of expertise needed to develop teachers who are suitably prepared. Not only do we require the academic content from other parts of the university community -- we must also have the important conceptual contributions of the social and behavioural scientists. Scholars from a variety of related fields must translate their esoteric understandings into language which teachers in our schools can use productively.

A further change needed at the university level concerns the coordination and integration of a multiplicity of divergent curricular offerings in the area of social services. In this regard, I suggest that we now have sufficient understanding about the human condition to recognize that there is much in the way of common understandings that are equally applicable to teachers, nurses, therapists, social workers, medical personnel, and other related service occupations. It is important that these various occupational groups share some common experiences and at the same time come to appreciate the contributions of a variety of complementary roles.

Again in the university setting, the matter of selection into teacher education is of considerable importance. Personally, all the evidence which I have reviewed makes me pessimistic about the use of entrance criteria. Apparently the usually accepted criteria of competence are not highly predictive of eventual performance in the classroom. This leads me to suggest that self-selection, based on certain well-defined experiences, early in the pre-service programme has greater potential in this important area of suitability. It is essential that individuals not become teachers by default, having invested too heavily of their time and other resources to make the transition to another career unrealistic. It has been our experience that too many students are remaining in education because of limited alternatives.

The area of practice teaching is one which is currently receiving considerable attention. Changes in this phase of teacher preparation are easily anticipated with a general shift toward more extended practica in the schools. This pleases teachers and administrators who perceive greater benefits to the school under these arrangements and clearly students are impressed to be "where the real action really is." What is curious about this whole trend is the basis upon which practicum duration is determined. How sound is the argument that "more is better" or even that we wish to model new teachers on the old? Conceivably, if we wish to change teacher behaviour, and many would argue that this has to occur, perhaps we need to consider something different from "sitting with Nellie" in the old craft tradition. Perhaps other clinical experiences such as micro-teaching, interaction analysis, and behaviour

odification techniques should be more carefully considered.

All of this leads me to the conclusion that a variety of relatively small but appropriately conceived pilot projects in the practical phase of preparation should be attempted within existing faculties of education. Carefully defined purposes should be identified in operational terms and adequate evaluation techniques developed in order that comparisons can be made. I am very prepared to argue that there is probably no single best way to prepare teachers, but rather that there are probably a variety of good alternatives, each of which is appropriate to a given group of students under a particular set of circumstances. The reasoned use of competency-based criteria may actually assist us in trying to arrive at suitable alternatives.

Basic to much of what I have said about the pre-service function is the necessity to develop better communication flows between school systems and universities. The interaction between these two concerned groups must become more meaningful, thus ensuring that place-ment, expectations, evaluation techniques, and other related student teacher matters are fully understood and accepted. The areas of authority and responsibility must also be much more clearly enunciated.

Another area which must be considered in the light of proposed change concerns the transition from the role of student to that of teacher. What we do now is something less than defensible in that the novice teacher normally inherits less than an ideal teaching situation. Often he has the least desirable students, the largest classes, and the greatest number of preparations. Most likely, he will find it

difficult to identify a colleague who has the empathy, time, or
competence to assist him in anything but a superficial way.

The resolution of this problem period in the career of a teacher
lies in my earlier central theme of teacher education as a continuous
process. University professors and practitioners in the field must begin
to consider the relationship between instruction provided aspiring
teachers on the campus and the early years of the work environment. One
possible solution is some form of internship involving teams of
experienced and novice teachers, operating in carefully selected school
settings. Such a modified teaching year, along with the development of
teaching centers at the local district level could do much toward a
smooth integration of the theoretical and the practical, while at the
same time speaking to some of the problems of the professional develop-
ment of experienced teachers.

Let me now complete this condensed presentation with a brief
discussion of graduate education programmes for teachers. It is my
opinion that universities have important responsibilities with respect
to the professional development of teachers but there are a variety of
reasons why the potential for this kind of improvement is not being
fully realized. First of all, there is this incredible faith in the
regularly constituted credit course. If it is not for credit in the
usual pattern of presentation, obviously it has to be inferior. This
tends to preclude workshops, institutes, and the like as suitable
learning experiences for teachers.

A second needed change, at least for us, is a careful review of the actual admissions criteria for entry into graduate degree programmes. Here I am not arguing for less rigorous entry requirements for teachers but rather I am suggesting that inadequate criteria are being employed now. To argue, for example, that undergraduate achievement is of much greater importance than certain universalistic measures of potential or outstanding performance as a teacher is patent nonsense. As far as the improvement of the backgrounds of teachers are concerned, admissions policies tend to be more for the benefit of the institution than for the society such an institution supposedly serves.

A third criticism which i wish to make of graduate programmes for teachers is that almost without exception such offerings are university-oriented, highly textbookish, and concerned essentially with the acquisition of paper and pencil skills. It is quite a rarity, and rare with criticism within the university community, to have graduate offerings which are focused on the attributes of teaching -- very little attention is given to the particular skills and techniques associated with the real daily demands of a classroom pedagogue.

Another related criticism of existing graduate programmes is that all do little to allow teachers to identify and remedy their own teaching inadequacies. Usually, teachers are restricted to existing courses, offerings in which they likely had little or no voice originally. Means must be devised by those responsible for providing graduate work to allow teachers to pursue individualized courses which are appropriate to specific needs and deficiencies. It is my impression that much of what

we are now providing teachers in the way of graduate education results in changes in the wallet thicknesses -- but the behavioural changes associated with teaching and learning are minimal.

In my view, university education should be at the cutting edge in terms of providing both inexperienced and experienced teachers with new knowledge and more effective methods. It is a role which we are not assuming now and reform is clearly demanded. In my opinion, universities are the most appropriate institutions to assist teachers in upgrading their subject matter competencies and in this sense scholars from a variety of disciplines must be persuaded to translate the knowledge which they have into a useful format for classroom educators. Settings must be provided by the universities in order that teachers may observe and employ new learning strategies, thus allowing them to understand the relevant application of such alternatives to classroom practice.

There is much more than could be said about the preparation of teachers but the hour is late. As has frequently been observed "As the posterior gets numb, the head gets number." Let me close by suggesting that there is much to commend what we do now to prepare teachers -- but there is equally much that has yet to be done. If teacher education is to move from its pleasant and blissful state to the point it becomes the dynamic for total growth and development in teachers, it will require the utmost of all of us. I leave you simply with a plea to consider how you can make your maximum contribution to the best of all causes.

# A COMPARISON STUDY OF FOUR METHODS
# OF DEVELOPING READING READINESS SKILLS

Kerry Quorn

University of Guam

## BACKGROUND

Morphett and Washburne's (1931) study concluded that a mental age of 6.5 was required for a reasonable chance of success when learning to read. For a variety of reasons, this figure became an almost unquestioned prerequisite for beginning reading instruction. This meant no reading instruction in kindergarten. The subject of early childhood education became a national concern during the 1960's. One of the results of that concern was a re-examination of the assumptions that had been made about reading readiness and beginning reading instruction.

Durkin (1966) identified two groups of students who learned to read before entering first grade and followed their elementary school careers very closely. Contrary to what might be expected from Morphett and Washburne's conclusion, these early readers did not have difficulty later on, but maintained an advantage over their non-early reading peers throughout elementary school. While Durkin, herself, interpreted these results very cautiously, others felt that this indicated that reading should be taught in kindergarten.

Results of these and similar studies have changed the concept of reading readiness from "waiting until the child becomes ready" to "providing appropriate skill development." Critics of programs exclusively

devoted to social development call for the addition of skill development activities. Language skill development and intellectual skill development are the two areas which seem to have the most emphasis at the moment. Advocates of language development point out that reading is a language skill, that reading follows oral language acquisition, and that many reading skills (especially phonic analysis) depend on oral language facility. Advocates of intellectual development point out the intimate involvement of thinking in the reading act.

The amount of structure needed in a readiness program is also debated. Advocates of highly structured programs emphasize the necessity of an inclusive, structured program. Advocates of less structured programs insist that the child should not/be pressured to perform, and call for variety and flexibility in program activities.

## PURPOSE

This study was designed to gain further information about the complex question of reading readiness. Four treatments were selected which represented social development, language skill development, cognitive skill development, structured programs and unstructured programs. By careful examination of the patterns of differences between treatments, it was felt that a clearer picture of reading readiness would emerge.

## DESIGN & PROCEDURES

Pupils from two kindergarten classes (N-54) were randomly assigned to four treatment groups. The four treatments were:

1. Science: A Process Approach, Part A. This is a structured program which has been developed to increase cognitive skills. The program consists of a series of science activities which involves observation and classification skills. The objective is to cause learners to develop skill in the ability to draw conclusions based on activity outcomes. If either program structure or intellectual development or both were significantly related to reading readiness, it was felt this group would achieve significantly higher reading readiness scores.

2. The First Talking Alphabet, Part I. The second structured program was developed to increase the language skill of relating written symbols with the sounds they represent. The program consists of a series of records which children listen to in order to identify sounds. At the same time, they look at cards designed to illustrate the corresponding symbol. Students also complete a dittoed worksheet involving the same sound/symbol relationship. If program structure were a significant variable, it was felt that this group (and the Science group) would achieve significantly higher reading readiness scores. If this specific language skill were a significant variable, it was felt that this group alone would have significantly higher reading readiness scores.

3. Investigator devised informal oral language activities. This was one of the less structured programs. The emphasis was on providing activities or experiences which the pupils then talked about. A few new words were discovered, but the emphasis was more on fluency than

vocabulary development per se. If a low level of structure were
significantly related to reading readiness, it was felt that this
group would achieve significantly higher reading readiness scores. If
general language development were significantly related to reading
readiness, it was felt that this group (and The Talking Alphabet
group) would have significantly higher scores.

4. Control treatment. The control group continued with the
classroom program taught by their regular classroom teacher. The two
classrooms had been selected because they emphasized social development.
The control treatment was intended as the second less-structured
program with social development as its purpose. If a low level of
structure was related to reading readiness, it was felt that this
group (and the informal group) would achieve significantly higher
reading readiness scores. If social development were significantly
related to reading readiness, it was felt that this group would have
significantly higher scores than all other groups.

The program was completed between January and May. A total of
14 sessions were held with each experimental group. During these
sessions, the control group continued with their regular classroom
program. This investigator conducted all experimental sessions. A
group of three sessions, one from each condition, was completed in one
day. The order of the sessions was rotated so that each group was
first some days, second on other days and last on the remaining days.

Three criterion measures were used: The Clymer-Barrett Pre-reading
Battery, a group administered, standardized reading readiness battery;

the Wepman Auditory Discrimination Test, an individually administered, standardized test of auditory discrimination; and the Moe Beginning Consonant Sound-Symbol R·' ship Test, a group admini tered, informal test of the child's abili y to relate consonant sounds with the symbols which represent them.

## RESULTS

A three way analysis of variance for each of the criterion measure yielded the following results:

1. No significant differences were found between any of the treatment groups.

2. No significant interaction effects were found among the four treatment variables, the two teacher variables or the sex variable.

3. A significant difference ($p < .05$) was found between the pupils of the two teachers on the Auditory Discrimination section of the Clymer-Barrett Battery; this difference favored pupils of the teacher who, on the basis of informal observation, used structured learning activities more frequently.

4. A significant difference ($p < .05$) favored boys on the Wepman Auditory Discrimination Test. Inspection of the Wepman results revealed many girls' scores which were invalid. The lack of representative scores from the girls appeared to be the cause of this unexpected finding.

CONCLUSIONS

The unexpected nature of the results of this study led to further examination of some of the factors involved. A search of the literature revealed that most pre-first grade studies which continued for less than one school year failed to show significant results. It would appear that anyone planning a short-term study should re-consider and extend the program if at all possible.

The difference favoring pupils of the teacher using frequent structured activities gives very qualified support for the use of structured materials. It must be noted that this difference was apparent for one skill only and was not supported by differences favoring the structured-materials treatment groups.

The difference favoring boys on the Wepman was not considered important per se because of the high proportion of invalid scores on this measure for girls. What was considered important was the reason for this number of invalid girls' scores. The only apparent explanation was the fact that this investigator is male. Since both teachers are female, the girls may have been nervous in this test situation. No lack of rapport was noted during the activity sessions, however. The effect of men in kindergarten classes would merit further investigation.

— A possible explanation for the lack of significant treatment differences is the ability of both teachers to not only concentrate on social development but to also develop skills. When the study was being organized, both teachers were concentrating on social development; by spring they

were both involved in reading readiness skill development. The time they spent with pupils may have masked possible treatment effects.

The most important aspect of this study is that it casts doubt on the hasty conclusions drawn from comparison studies. It would seem to be important to reanalyze studies which have concluded that no significant differences means the programs are equally effective. Perhaps it means that they are equally ineffective.

REFERENCES

Clymer, T. and Barrett, T.C.  Clymer-Barrett Pr reading Battery.
Princeton, N.J.:  Personne. Press, 1966.

Durkin, D.  Children Who Read Early.  New York.  Teachers' College Press,
1966.

Johnson, R.  The Validity of the Clymer-Barrett Pre-reading Battery.
Reading Teacher, 22: 609-14, April, 1969.

Moe, A.  Beginning Consonant Sound Symbol Relationship Test.  Minneapolis,
Minnesota, 1971 (Xerox Copy).

Moore, O.K.  Clarifying Environments Program.  Educational Technology
11: 73-77, February, 1971.

Morphett, M.V. and Washburne, C.W.  When Should Children Begin to Read?
Elementary School Journal, 31: 496-503, March, 1931.

Wepman, J.  Auditory Discrimination Test.  Chicago:  Language Research
Associates, 1958.

A COMPARISON STUDY OF READING READINESS SKILLS ACQUISITION BY

TWO METHODS: A TRADITIONAL READING READINESS PROGRAM

AND A KINDERGARTEN SCIENCE CURRICULUM*

Larry Yore

University of Victoria

## PROBLEM

The major purpose of this study was to assess the effectiveness
of two dissimilar programs, Science: A Process Approach and The First
Talking Alphabet, upon the acquisition of reading readiness skills of
kindergartners.

## RATIONALE

Studies by Gates, Bond and Russell (1939), Smith (1957), Barrett
(1965), Bond and Dykstra (1967), Johnson (1969) indicated a predictive
correlation of certain skills (comprehension and useage of oral language,
visual and auditory discrimination, knowledge of letters, knowledge of
numbers, knowledge of quantitative relationships, shape completion,
sensory-motor skills related to handwriting, and following directions)
and reading achievement at a later date. The research by Olson (1958)
and Rosen (1965) indicated that these skills may be developed through
training. Based on these findings educational publishing companies
have developed numerous programs directed at the attainment of these

*Based on a Ph.D. Thesis, University of Minnesota, Minneapolis, 1973.

skills prior to the normal reading program. These programs are generally installed in the youngster's early years of education; namely, kindergarten or early months of first grade. The research of Ollila (1970) indicated that these programs have achieved varying degrees of success.

Newport (1969) and Furth (1970) expressed an interest in determining whether these readiness skills can be acquired through a less-direct approach; namely, whether certain science activities might provide an opportunity and climate for the development of reading readiness skills. The observed similarities between the "new" elementary school science curricula and several experienced kindergarten teachers' informal readiness activities, paired with a survey of the relevant literature, led one to believe that science processes and reading readiness skills are not mutually exclusive. Therefore, science instruction might provide an effective reading readiness program, if not for all pupils, perhaps for pupils of a particular sex.

Ayers' (1969) study investigated the effectiveness of A Level, Science: A Process Approach with preschool children. Achievement measured by Ayers' Science Process Test indicated significant gains for three-, four-, and five-year-old groups. Ayers' study indicated a significant positive correlation between achievement on the Ayers' Science Process Test and school readiness, as measured by the Metropolitan Readiness Test.

Ayers and Ayers (1973) found that Science: A Process Approach effective in increasing logical thinking of kindergartners as measured by six Piagetian conservation tasks (number, liquid amount, solid amount,

length, weight, and area). Achievement on these conservation tasks correlated significantly with the scores on the Metropolitan Readiness Test.

Rowe (1973) reported that:

> Symmes...and Papoport...found that boys who excell in building models and who can remember and produce patterns better than their peers tend to be poor readers. This ability, which is useful in the sciences, namely, three-dimensional spatial visualization, may make these children mistake certain letters for others (i.e., b, p; q, d).

Ritz and Raven (1970) investigated the effects of a structured process science and visual perception programs on kindergarten children. Their study contrasted the effects of Science: A Process Approach with and against the effects of Frostig's Program for the Development of Visual Perception on reading readiness, visual perception, and science process achievement. This was accomplished using a two-phase, blocked instruction, repeated measures design. During the first phase of instruction, two of the three treatment groups received instruction in Science: A Process Approach and the third received their regular kindergarten program. In the second instructional phase, one of the Science: A Process Approach group returning to their regular kindergarten program. Data collected at the end of the first instructional phase favored the Science: A Process Approach groups on all measures. A significant difference was found on science-process achievement. At the end of the second instructional phase, data indicated significant differences on visual perception measures favoring the treatment groups receiving Frostig's visual perception training. No significant differences were found in reading readiness and science process achievement at the end of the second

instructional phase. Ritz and Raven suggested that this study supported
the contention that science instruction should be included in kinder-
gartens. They stated that the inclusion of science could be accomplished
"without detracting from other important educational outcomes".

Ayers and Mason (1969) investigated the effect of Science: A
Process Approach on reading readiness of kindergarten children. This
study contrasted the effect of Science: A Process Approach and the
regular kindergarten program on reading readiness as measured by the
Metropolitan Readiness Test. The analysis of mean gain scores indicated
that the science treatment group made significant gains on five subtests
(listening, matching, alphabet, numbers, and copying) and the total
Metropolitan Readiness Test. Comparisons of mean gain scores between
treatment groups indicated significant differences on four subtests
(word meaning, listening, numbers, and copying) and the total Metropolitan
Readiness Test. Only the word meaning subtest favored the control group
with the others favoring the Science: A Process Approach group. The
authors suggested that science activities contained in Science: A
Process Approach appeared to promote reading readiness as measured by
the Metropolitan Readiness Test.

## EXPERIMENT

The null hypotheses tested in this study were: there will be
no treatment, sex, and attendance time main effects, interaction effects,
and differences between pretest and posttest means on any of the reading
readiness measures. The dependent variable, reading readiness skills,
was measured by the Metropolitan Readiness Test, the Clymer-Barrett

Prereading Battery, and their respective subtests. The independent
variables of treatment, sex, and attendance time were expressed as
dichotomous categories.

Fifty-one students from a morning and afternoon kindergarten class
of a Victoria, British Columbia, Canada, public school were randomly
assigned to four treatment groups. A morning and afternoon treatment
group was randomly assigned an instruction program with the remaining
two treatment groups being assigned the other instructional program.
The two reading readiness measures were administered to the sample on a
pre- and posttest schedule. Randomly selected testing subgroups were
used in these administrations. The testing subgroups were selected
across treatments in an attempt to minimize any possible bias introduced
by variation in the administration of the reading readiness measures.
The treatment consisted of the investigator teaching the two instructional
programs to the assigned treatment groups for ten weeks. Each treatment
group received 22 half-hour periods of instruction. The instructional
programs used were Science: A Process Approach (Part A) and The First
Talking Alphabet.

Science: A Process Approach, Part A (Xerox Corporation, 1967)
was the end product of the American Association for the Advancement of
Science's federally funded effort at curriculum development. The
program represented years of development and evaluation of several
innovations in the areas of objectives, materials, and instructional
strategy for kindergarten science. It consisted of 22 structured units,
arranged in sequential hierarchy, with each unit containing several

instructional activities directed at the attainment of the specific

behavioral objectives of that unit. The objectives of the program

dealt with basic scientific processes and content. The scientific

process objectives were observing, using space/time relationships,

using numbers, measuring, and classifying. The scientific content

resulted from the specific learning activities undertaken to accomplish

the process objectives.

The instructional materials provided by the program varied

depending on the unit and/or the activity within a given unit. Most

of the materials used were designed to maximize the concrete experience

of the student with the phenomena under investigation.

The instructional strategies recommended in the teacher-text were

demonstration-discussion and laboratory-discussion. Each strategy

stressed the personal involvement of the student with the phenomena

in such a way as to provide the stimulus for the inquiry. The discussion

phase of the instructional strategies utilized guiding questions

designed to direct the inquiry process rather than to elicit factual

responses from the student.

The First Talking Alphabet (Scott Foresman and Company, 1967)

was designed to instruct prereaders in the specific readiness skills

of the phoneme-grapheme relationship. The association of initial or

final consonant sounds to the letter(s) symbol of that sound can be

taught, retaught, or reviewed using the materials and instructional

strategy. This program provided materials designed to involve the

student's aural, oral, visual, and kinesthetic perception in the

learning activities. The instructional involvement centered around
phonograph records, picture cards, and individual worksheets. The 42
lessons of this program were focussed around 21 records. Each side
of the record provided the verbal presentation for one lesson. Sets of
picture cards consisting of an artist's depiction of words referred to
in the recordings were used in conjunction with the verbal presentation.
In the lower right-hand corner of each picture card were raised,
flocked capital and small symbols of the letter making the sound under
consideration.

The First Talking Alphabet used recorded, programmed instruction in
combination with conventional drill. The first 36 lessons of the program
required that no specific sequence be followed. The remaining 6 lessons
followed the instructions of the first 36, but no specific sequence was
required.

The development of each lesson incorporated the playing of a
recorded presentation in which the student was directed to respond to
various stimuli. The required response was in the form of pointing to
a specific picture named, verbally repeating a word, answering a
question, or tracing a letter. The use of worksheets was intended to
provide an opportunity for the student to apply the newly-learned phoneme-
grapheme relationship. The teacher provided guidance to the student when
he encountered some difficulty which prevented his progress.

Upon completion of the treatment and posttesting, the reading
readiness tests were scored. The posttest data were then analyzed
by a three-way analysis of variance, using treatment, sex, and attendance

time as the main dimensions. The pretest-posttest mean gain scores for each treatment, sex, and attendance time group were analyzed by a correlated t-test technique.

## FINDINGS

The three-way analysis of variance on the posttest data yielded significant ($p \leq 0.05$) difference between attendance times on the Clymer-Barrett discrimination of beginning sounds subtest, treatment-by-attendance time interaction on the Metropolitan matching subtest, and treatment-by-sex-by-attendance time interaction on the Metropolitan copying subtest.

The t-test analysis of gains between pretest and posttest means yielded 51 significant ($p \leq 0.05$) findings and an additional 13 at ($p \leq 0.10$) significance. A summary of the t-test analysis of mean gains may be found in Table 1.

## CONCLUSIONS AND RECOMMENDATIONS

Within the confines of the limitations and design of this study, the findings appear to support several conclusions related to the acquisition of reading readiness skills by kindergarten students. It appeared that (1) both programs produced similar types of achievement, (2) both sexes benefited from instruction in kindergarten, and (3) neither program had specific differential effect for a given sex group.

Additional studies are necessary to compare these specific instructional programs against an informal approach, which would

-211-

21.

## TABLE 1

Summary of the Significant Correlated t-tests on Treatment, Sex, and Attendance Time Group Pretest-Posttest Mean Gain Scores

| Measure | Morning | | | | Afternoon | | | |
|---|---|---|---|---|---|---|---|---|
| | Female | | Male | | Female | | Male | |
| | FTA | SAPA | FTA | SAPA | FTA | SAPA | FTA | SAPA |
| **Metropolitan** | | | | | | | | |
| Word Meaning | | | | | | c | | |
| Listening | | | | * | * | | * | * |
| Matching | * | * | * | * | c | | * | * |
| Alphabet | * | c | * | * | c | | c | |
| Numbers | | * | | * | | | | |
| Copying | | c | | | c | | | |
| Total Test | | c* | * | * | * | c | * | * |
| | | | | | | | | |
| **Clymer-Barrett** | | | | | | | | |
| Letter Recognition | c | c | | * | * | * | * | c |
| Word Matching | * | * | | * | * | c | * | c |
| Beginning Sounds | | * | c | * | * | ** | * | |
| Ending Sounds | | | | | | * | | |
| Shape Completion | * | * | * | * | * | | * | c |
| Copy-a-Sentence | | | | | | | | |
| Total Battery | * | * | * | * | * | * | * | * |

*Denotes significant at p ≤ 0.05.
cDenotes significant at p ≤ 0.10.

-212-

allow the achievement gains and variances to be partitioned more completely. Comparative studies between informal and a variety of formal content programs are needed. Replication of this study to determine the effect of teacher sex and socioeconomic status of the students would be informative.

# BIBLIOGRAPHY

Ayers, J.B. "Evaluation of the Use of Science: A Process Approach Upon Change in Metropolitan Readiness Test Scores Among Kindergarten Children". The Reading Teacher, 1969, 5, 435-439.

Ayers, M.N. and Ayers, J.B. Study of Kindergarten Pupils' Use of Logic in Problem Solving Through SAPA. Presentation, AERA, February 1973, New Orleans, Louisiana.

Ayers, J.B. and Mason, G.E. "Differential Effects of Science: A Process Approach Upon Change in Metropolitan Readiness Test Scores Among Kindergarten Children". The Reading Teacher, 1969, 22, 435-439.

Barrett, T.C. "Visual Discrimination Tasks as Predictors of First Grade Reading Achievement". The Reading Teacher, 1965, 18, 276-282.

Bond, G.L. and Dykstra, R. "The Cooperative Research Program in First Grade Reading Instruction". Reading Research Quarterly, 1967, 2, 5-141.

Clymer, T. and Barrett, T.C. Clymer-Barrett Prereading Battery, Form A. Princeton, New Jersey: Personnel Press, 1967.

Fernkopf, F., Johnston, M. Schiller, A., Monroe, M. and Manning, J. The First Talking Alphabet. Glenview, Illinois: Scott Foresman and Company, 1967.

Furth, H.G. Piaget for Teachers. Englewood Cliffs, New Jersey: Prentice-Hall, Incorporated, 1970.

Gates, A.I., Bond, G.L. and Russell, D.H. Methods of Determining Reading Readiness. New York: Bureau of Publications, Teachers College, Columbia University, 1939.

Hildreth, G.H., Griffiths, N.L. and McGauvran, M.E. Metropolitan Readiness Tests, Form A. New York: Harcourt, Brace and World, 1964.

Johnson, R.E. "The Validity of the Clymer-Barrett Prereading Battery". The Reading Teacher, 1969, 22, 609-614.

Newport, J.F. "Can Experiences in Science Promote Reading Readiness?". The Elementary School Journal, April 1969, 375-380.

Ollila, L.O. The Effects of Three Contrasting Readiness Programs on the Readiness Skills of Kindergarten Boys and Girls. Unpublished Ph.D. Thesis, University of Minnesota, 1970.

Olson, A.V. "Growth in Word Perception Abilities as it Relates to Success in Beginning Reading". Journal of Education, 1968, 140, 35-38.

Ritz, W.C. and Raven, R.J. "Some Effects of Structured Science and Visual Perception Instruction Among Kindergarten Children". Journal of Research in Science Teaching, 1970, 7, 179-186.

Rosen, C.L. A Study of Visual Perception Capabilities of First Grade Pupils and the Relationship between Visual Perception Training and Reading Achievement. Unpublished Ph.D. Thesis, University of Minnesota, 1965.

Rowe, M.G. Teaching Science as Continuous Inquiry. New York: McGraw-Hill, 1973.

Smith, L.E. Auditory Discrimination and First Grade Reading Achievement. Unpublished M.Ed. Thesis, Illinois State Normal University, 1957.

# SCIENCE CONTENT READABILITY AS DETERMINED BY CLOZE PROCEDURE

## Donald R. Daugs

### University of Victoria

Classroom exposure to Dr. Ned Markshellef at Oregon State University convinces one that every reading teacher should be a subject matter teacher and that every subject matter teacher should be a reading teacher. Time passes, outstanding teachers disappear and new ones take their place. One thing is certain at a meeting such as this, we will all agree that students of all ages have difficulties reading in the content areas. Informal reading inventories (Daugs 1968) indicate that over 50% of students using seven current junior and senior high science textbooks were unable to read at the instructional level.

If science teachers are going to require their students to read, then they must not forget that they are also reading teachers. The typical science classroom situation delegates the reading experience to an out-of-classroom experience. If the student who reads at the frustration level does attempt to fulfill science assignments, he can receive only small benefits from reading alone.

A possible solution to this dilemma might be to provide textbook materials at the instructional reading level of the individual student. Initial impressions of this problem prompted an investigation of use of multi-level materials in science. In three related studies by Fryback (1965), Daugs (1970) and Daugs (1973) using SRA science materials written at five levels of difficulty, no significant differences in student performance were found when one or more than one level of materials was used. Initial impressions were that improper placement at difficulty level had confounded the expected results. Careful use of informal reading inventories for placement at difficulty level seemed the best means of satisfying this requirement. Classrooms using five levels of materials performed significantly poorer when classrooms were equated statistically by using a teacher rating as a co-variate. It was concluded that most teachers were not

able to cope effectively with more than one level of materials.

Robinson (1964) attributed much of the difficulty in reading high school biology texts to the impact of new science vocabulary. He found that the 1963 edition of BSCS Blue Version Biology introduced scientific terms at the rate of 4 per 100 words or approximately 7,000 scientific words in the entire textbook. Our traditional approach to determining readability often fails to analyze the real contribution of science terms to overall reading difficulty. For example, the term "DNA" as part of a sentence would not contribute greatly to the difficulty of a sentence as analyzed by most readability formulas. Unfortunately most formulas do not take into consideration the concept difficulty of such terms.

Bormuth (1967a) advocates the use of the cloze procedure as a means of determining readability in subject matter areas with specialized vocabulary. Cloze procedure refers to omitting every nth word from the text material and substituting a blank of a set length. Students are required to supply the exact word used by the author. By using various forms of a cloze test all words from a textbook sample may be covered. In the study discussed in this paper the formula for omitting words for each form was every nth word, every nth + 5 word, every nth + 10 word, etc. where n was the first, second, third, fourth and fifth word in the passage. The cloze procedure also provides a means of analyzing which words, phrases or sentences produce the greatest difficulty.

To investigate the possible application of cloze procedure to determine science content readability, passages totaling 713 words were selected from the first half of Biological Science, Molecules to Man, 1963 edition. Passages from this high school biology text were selected by randomly choosing

five page numbers and then extracting a paragraph on or near a randomly selected page with content that could stand alone as a reading unit. The mean readability of these passages as determined by the Flesch (1948) formula was 11th to 12th grade.

Five forms of cloze tests were developed by deleting successive words as described above. These tests were administered to 285 tenth grade biology students in twelve classrooms. Students within classrooms were randomly assigned to one of the five forms. All students were also given the Davis Reading Test, Form 2A, series 2, as a measure of general reading ability.

KR-20 reliability on the five forms of the cloze test ranged from 0.953 to 0.978. When data from all five forms were combined, mean difficulty was 43.9%. Bormuth (1967b) reported in two studies that a cloze score of 44% corresponds to a traditional comprehension score of 75%. Coleman and Miller (1967) determined that a passage difficulty of close to 44% resulted in greatest gain in student retention of information. Dauqs (1970) found that the 44% level on post test scores corresponded to grade level performance for fifteen classrooms of sixth grade science students. On the basis of these studies, comprehension at grade level seems to be reflected in the 44% cloze score.

The mean scaled score on the Level of Comprehension subtest of the Davis Reading Test was 72. Extrapolating from data provided by Davis and Davis (1962), the grade level norm for subjects would be grade 12. This corresponds with the readability level of the text under study as determined by the Flesch formula, but does not conform with the concept that a cloze score of 44% indicates grade level comprehension. If the text

readability and student comprehension ability were in agreement, these grade

ten students would have had approximate scores of 44% on the cloze test, a

scaled score of about 66.5, and the text would have yielded a Flesch score

of 10th grade level.

Informal reading inventories and the cloze scores indicated that

the standardized tests and the readability formulas scored the students too

high.

In an attempt to determine the contribution of science vocabulary

to passage difficulty all words were categorized as either science or non-

science words. Words were identified as "scientific" if they were clearly

recognizible as scientific terms, e.g. hypothesis, or if they in the judgement

of the writer, were being given scientific meaning, e.g., the word "competition"

in the phrase "in competiti n with similar organisms."

Thirty-eight percent of the 713 words in the passage were

categorized as science words. For items with a difficulty of 0.30 or less,

i.e. the most difficult items, the percentage of science words was also 38%.

Robinson (1964) implied that the rate at which new words are introduced was

a major factor in reading difficulty. It was assumed by this writer that the

science words with an item difficulty of 0.30 were new words. It was hypothesized

that if these most difficult science words were new vocabulary, then word

recognition tests for lists of these difficult words would produce lower scores

than word recognition tests made up from lists of easier science words.

Accordingly three lists of eight science words were randomly selected from the

words with item difficulties of >0.80, 0.45-0.55 and <0.20 respectively.

These words were flashed in a "tachistoscopic manner" to 15 randomly selected subjects to determine differences in word recognition. These 15 students were a subset of the total experimental group. The word list was typed out in a triple spaced column. In administering the test words were covered with two file cards. A "flash" consisted of separating the cards to expose the word for about one second. It was assumed that if the student could not pronounce the word in flash he could not get the meaning of the word. Data from these sight vocabulary tests were not subjected to statistical analysis. Only three students missed any words at the flash. They pronounced all words correctly in untimed exposure. It was therefore concluded that difficulty of science words was not dependent on word recognition.

The 15 students were then asked to orally define words from the three lists of words used for the word recognition tests. This researcher could not perceive any differences in ability to define the words at the three levels of difficulty used in these lists. It was concluded that impact of science vocabulary was not a major contributor to sentence difficulty.

A multiple stepwise regression analysis was conducted on passages, using total number of words per sentence, number of science words, words with item difficulties <0.20, number of deep structure sentences within each sentence, number of infinitives and passive constructions, as predictors of mean sentence difficulty. It was found that only total number of words was significant at the 0.01 level. This factor accounted for 60% of the variability.

The three variables involving item difficulties of <0.20 were not significant contributors to mean sentence difficulty. This is worthy of note because calculation of mean sentence difficulty is already dependent on these values. Insignificant contribution in the regression analysis

indicates that these difficult words do not fully explain sentence difficulty. These findings further substantiate the statements about difficult science words.

Working with Fred Daugs, Consultant on Transformational Grammar, at Carl Sandburg Junior High School, Golden Valley, Minnesota, two paragraphs of the cloze test were subjected to transformational grammar analysis. The total report of this analysis will appear under the title "Readability of High School Biology Materials" by Donald R. Daugs and Fred Daugs, in Science Education.

Application of the transformation grammar system has the capacity to show what we understand the sentence to mean. This is called deep structure. Surface structure is what we see or hear. It must be kept in mind that the analysis that follows is as the researchers understand the structure.

As an example of the results of this analysis, data from one sentence is presented below. Item difficulties appear above each word, followed by the deep structure sentences which depicts the author's intended meaning.

```
              .21      .33  .8    .23        .18  .60    .25    .18  .87
         Information about the physical structure and chemical nature of

.16   .17    .72    .74  .63 .67  .03  .78   .18   .51  .60 .47
DNA helped Watson and Crick to devise a molecular model of DNA.
```

Deep structure sentences

(1)  Information helped Watson.

(2)  Information helped Crick.

(3)  Some information was about the structure of DNA.

(4)  The structure was physical.

(5)  Some information was about the nature of DNA.

(6)  The nature was chemical.

(7)  Watson devised a model.

(8) Crick devised a model.

(9) The model was DNA.

(10) The model was molecular.

The word _information_ has an item difficulty of .21. This word is a noun that pairs with the verb _helped_. The distance from noun phrase to verb phrase increases difficulty. Also there are four sentences in the deep structure between the words _information_ and _helped_ that eventually produce the surface structure.

The similar degree of difficulty with the words _physical structure_ and _chemical nature_ suggests that the deep structure are not understood. Pairing of the abstract words, _structure_ and _nature_ with _physical_ and _chemical_ does not clarify the meaning.

One would expect the difficulty of the word _DNA_ to remain at the same degree of difficulty. _Nature of DNA_ does not seems to be as clear as _model of DNA_.

Placement of _helped_ next to the difficult item _DNA_ may cause the reader to incorrectly pair _helped_ with _DNA_ rather than _information_. This would lose the idea that _information helped_ and that the _information was about DNA_. This possibility may account for the difficulty of the word _helped_.

Pairing of _to_ with _devise_ in the surface structure infers that the deep structure _Watson and Crick devised a model_ is not understood. Furthermore, the tense form is lost in the surface structure and the time element is not clear in _to devise_.

Analysis of this one sentence illustrates how an author's style contributes to sentence difficulty. An application of transformational

grammar analysis to readability data obtained by the cloze procedure has merit as a means of determining which factors within a sentence contribute to its overall difficulty. The style of the writer appears to be the most critical factor in determining the reading difficulty level in these materials.

On the basis of findings of this study the passages for the cloze test are being rewritten and a new test will then be administered to a similar population of students. This researcher feels that the authors of textbooks could well profit from input from the reading experts and linguists. No doubt there will always be reading problems, but closer work between the science author and experts in other disciplines should help alleviate the student's reading problems.

## REFERENCES

1. Fryback, William Herbert. "Evaluation of Multi-level Reading Materials on Achievement in Fifth Grade Elementary Science." Doctor's thesis, Oregon State University, 1965.

2. Daugs, Donald R. "Evaluation of the Influence of Multi-level Reading Materials on the Achievement of Fifth Grade Elementary Science Materials when Placed at Reading Level by an Informal Reading Inventory." Doctor's thesis, Oregon State University, 1970.

3. Daugs, Donald R. "Influence of Multi-level Science Materials on Achievement of Sixth Grade Students." Journal of Research in Science Teaching, Volume 10, Number 2, pp. 147-152, 1973.

4. Robinson, James T. "Understanding of BSCS Biology Students as Determined by Instructional Tests". Cooperative Research Project No. 1969, Claremont Graduate School and University Center, Claremont, California, 1964.

5. Bormuth, John R. "Cloze Readability Procedure," CSEIP Occasional Report No. 1, University of California, Los Angeles, February, 1967a.

6. Flesch, Rudolf.. "A New Readability Yardstick." Journal of Applied Psychology, 32 (June 1948), pp. 221-233.

7. Bormuth, John R. "The Implications and Use of Cloze Procedure in Evaluation of Instructional Programs." CSEIP Occasional Report No. 3, April 1967b, University of California, Los Angeles, 50 pages, ED012, 674.

8. Coleman, E.B. and G.R. Miller. "A Measure of Information Gained During the Learning of Prose." Texas: Western College of the University of Texas, 1966, unpublished.

9. Daugs, Donald R. "Student Ability to Read and Comprehend Science Textbooks." Unpublished paper, University of Victoria, 1970.

10. Davis, Frederick B. and Charlotte Croen Davis. Davis Reading Test Manual. The Psychological Corporation. New York, 1962.

11. Robinson, op. cit.

# AN ANALYSIS OF THE READABILITY OF INTERMEDIATE LEVEL
## SOCIAL STUDILS TEXTBOOKS

### Clifford D. Pennock

#### University of British Columbia

"Despite the pressure from teachers for simpler instructional materials, textbooks in the content fields continue to be difficult reading matter for the majority of children for which they are intended", wrote Harris (1972), describing content texts in the United States.

In Canada, Covell (1965) reported the results of several studies of the readability of social studies texts authorized for use in the intermediate grades in British Columbia. The grade five textbook. Southern Lands (1961), for example, was reported to have a mean difficulty of 7.3 and a range of readability of 5.8 to 13.3.

It would appear that some of the older social studies texts in use in the intermediate grades presented excessive difficulty to many children who were reading in what might be termed the normal range - those students reading at grade level plus or minus one. Extreme frustration could be anticipated in using these materials with children reading considerably below grade level. Even that remaining third of students reading one or more grade levels above grade placement might be expected to have difficulties with many passages encountered, when we take into account that there were many sections in the materials well beyond grade level in difficulty, with passages at the grade nine, ten, eleven, twelve and even college levels.

One might expect that books presently being adopted for new curricula might be more appropriate in difficulty level for the children who will be asked to read them, under the assumptions that such books are to be part of a communication process in the social studies, that students are to acquire and use various data derived from the texts and other sources both independently and under teacher direction, and that both concept knowledge and process skills will grow thereby.

The advent of "quick" readability procedures such as Fry's (1969) Readability Graph has perhaps stimulated a number of studies in which the readability of recent social studies texts has been analyzed. Johnson and Vardian (1973) used the readability procedures of Spache (1913), Flesch (1948), Dale and Chall (1955) and Fry( 1969), to assess the readability of five series of social studies texts recently published in the United States. Most books were found to contain passages one or more years above grade level in difficulty with the readability range within individual texts from two years to twelve years. The conclusion was reached that only some of the books were easy enough for average readers. Most books require readers to be above average. None of the books would be appropriate for the slow or low-achieving child.

In a recent study of social studies texts authorized for use in British Columbia secondary schools, Slade and Wilson (1973), making use of Fry's (1969) Readability Graph, reported great variability within individual texts and across texts at a given grade level. At the grade eight level, for example, mean readability for individual texts varied from high six to college level. The authors concluded that the A issue (whole class sets) texts "were probably unsuited to the majority of students for whom the texts are intended". The unfortunate learning situation of the slower student using such overly difficult material was also pointed out, "One can only guess at the feelings toward geography of a student with perhaps grade six or grade seven reading competencies who is trying to read through college level materials".

All but one of these texts sampled has mean readability levels higher than the designated grade placement.

Among the B issues texts (issued in smaller numbers for small group and individual use), at least 50% of the books sampled at each grade level had average readability in line with the grade for which the books were prescribed. Something very puzzling to this writer appeared at the grade ten level, however - two books of the Ginn Sample Studies Series - Iron Mining in Quebec, Labrador (1968) and Wheat Farming Near Regina (1969) had readability samples reported well below the grade ten level. Authorizing these books at the ten level seemed at first glance

an excellent plan.    The readability of many samples was lower than the
ten level.    Comprehension would be no problem for the average and many
of the below average readers, for whom almost all of the A level books
would present extreme difficulty.    What amazed the writer, however, was
the recollection that this series and these books had been authorized
for use in grade f ve!

Since the mean readability of these books as reported by
Slade and Wilson (1973) was two and three years in excess of the grade
five placement of the books, the questions arose:  How would the readability
of the other Ginn Sample Series texts relate to intermediate grade
placement?   How would the readability of other social studies texts
relate to their use at the intermediate level placement?

Discussion with teachers attending the Fourth Annual Reading
Conference at the University of British Columbia in April, 1973 brought
forth the opinions that teachers had been aware that many content books,
and particularly the newer ones in social studies in the intermediate
grades, were too difficult for all but the extremely gifted readers in
any classroom.

Teachers were interested in finding out how they could
ascertain the difficulty of books and passages within books.    For these
reasons, the writer, together with developmental reading course students,
both preservice in the winter months and experienced teachers (in summer
session) have examined the difficulty of content area reading texts,
particularly those in social studies.

Fry's (1969) Readability Graph was applied to all of the
social studies texts (e  pt the atlas) prescribed for use in British
Columbia schools for 1972-1973.    Some results of this analysis are
shown in Table 1.    It will be noted that sampling was extensive at
each level;   no fewer than six samples were taken from any one text and
in most cases a considerably larger number than this was used.    Looking
across the chart at each level, it will be observed that there was a very
large spread of difficulty within texts.    At the grade four and five

Table 1

SOCIAL STUDIES TEXTS - PRESCRIBED FOR USE IN BRITISH COLUMBIA

GRADES FOUR TO SEVEN
SUMMARY OF GRADE MEANS AND RANGES

| Grade | Number of texts | Number of Samples | Mean | Range | Text with smallest range | Text with largest range | Range Median |
|---|---|---|---|---|---|---|---|
| Four | 7 | 226 | 7.7 | 3-15 | 7-10 | 4-13 | 6 |
| Five | 23 | 219 | 8.1 | 3-15 | 7-8 | 4-13 | 5 |
| Six | 11 | 210 | 8.2 | 5-13 | 6-10 | 6-15 | 6 |
| Seven | 2S | 201 | 8.0 | 3-13 | 6-7 | 6-13 | 3 |

levels, for example, some texts had as many as eleven levels of difficulty, with passages ranging from the 4 to 13 level. Looking down the columns, and particularly the column titled "Mean", it will be noted that the difficulty of texts does not differ greatly from grade to grade - the books assigned to grades four, five, and six, would appear as difficult as those prescribed for grade seven. If the average difficulty of books at these levels is two to four grades above placement, the conclusion might be made that a number of these texts is probably too difficult for many students in grades four through six. This conclusion is strongly supported by the data summarized in Table 2 - Summary of Sample Variability. Two questions can be asked: 1) What does the data tell us about how many children might read these books with profit? 2) What are we told concerning how many children would have extreme difficulty with these books?

Consider, for example, students half-way through their school year (Expectancy data is taken from Harris (1972) page 94). Looking at the children first who are having slight to serious difficulty in learning to read, one might expect 30%-35% of the students in grade four to be reading below the grade four level; 30%-35% of the grade five students to be reading below the grade five level, etc. What percentage of the text material is suited to them? Among the grade four texts, only one of the 126 samples was easier than the four level - there is almost nothing for below average grade four children. At the grade five level texts, only 3% of the 219 samples were below five level in difficulty or suitable for below average grade five children. There are more easier passages for grade seven students as can be seen - approximately 22% of the grade seven samples are below grade seven level in difficulty. Looking down the columns under 0-4, 5, 6, one can observe the reason. As noted previously, the books for grades four through seven are at about the same level of difficulty. Slower grade seven students, will, therefore, find more passages suited to their reading needs.

If one looks across Table 2 to the diagonal scored in double lines, we include 30%-35% of our students, those grade four students, for example, who read at grade level, slightly above or slightly below - grade four students, for example, who read between 4.0 and 5.0. How

Table 2

SOCIAL STUDIES TEXTS PRESCRIBED
FOR USE IN BRITISH COLUMBIA

GRADES FOUR TO SEVEN
SUMMARY OF SAMPLE VARIABILITY

Per Cent of Samples at or Below Readability Levels Indicated

| Grade | Range | 0-4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12-15 |
|-------|-------|-----|---|----|----|----|----|----|----|-------|
| Four  | 4-13  | 2   | 3 | 14 | 51 | 68 | 85 | 92 | 93 | 100   |
| Five  | 3-13  | 3   | 5 | 17 | 46 | 62 | 81 | 90 | 95 | 100   |
| Six   | 6-15  | 2   | 5 | 16 | 42 | 60 | 77 | 87 | 95 | 100   |
| Seven | 6-15  | 2   | 7 | 22 | 54 | 69 | 84 | 92 | 96 | 100   |

many samples are at or below their level? As can be seen, only 2%. For grade five and grade six students, the situation is not much better. At the grade seven level, however, the picture is much brighter, with 54% of the samples of readability at the 7 level or lower. If we look at slightly above average readers we can think of some 20% of our students who read approximately a grade above level - grade four students for example, reading within the five range. Only 3% of the grade four samples are at this level or easier with 97% of the grade four samples above the five level. One can conclude that most of the grade four material is too difficult even for above average readers in grade four, and suited only to that 10% or so of gifted readers in the grade.

Looking at individual books, only for grade seven is there a sufficient spread of readability between books. Seven of these texts, for example, have mean readabilities slightly below seven with samples within books running from 3-7. Most of these books are too difficult for severely retarded readers but they are appropriate for students reading a grade or so below seven. The average range reader in grade seven is also quite well-provided for by these books and by ten books at the seven level, although samples within books run 5-11 and parts of the books present difficulties. The latter books are appropriate for above-average readers, as are six books at the eight level. Three books at the 9-10 level, as well as many portions of the previous texts provide sufficient challenge for the gifted.

The grade seven books provide a considerably better spread than do the other levels. A remaining need for grade seven would be some high interest books where difficulty levels are kept at the five level or below.

At the grade four level, one gets the impression the books were designed for junior secondary students. Four of the seven books have readabilities of 8 or more; none are below six. For grade five, no books have a mean readability below six; fourteen of the twenty-three are at the eight level or above; most books have their easiest samples at the six level, with ranges typically running 6-10 and 6-11.

Grade six texts run from 7-10 level in mean readability with ranges such as 6-10 and 7-11 within books. Grades four to six books would seem appropriate only for gifted readers. Several books in each grade might be used with above average readers. All of the books at the grade four to six level present too many difficulties for average readers, and unsurmountable frustration for below average readers. At the grade four to six level, books must be found for the 90% of students in each class who are not gifted.

A listing of the texts, their average readabilities and ranges of difficulty is provided in the Appendix to this article.

The question arises - How accurately is the analysis presented? Does it overestimate the difficulty these texts present to intermediate level students? The answer is an unequivocal No. If anything, these estimates are conservative. Fry's formula was applied according to his articles in the Journal of Reading (1968) and his text (1972). Proper nouns were not taken into account. This seemed to underestimate the real difficulty of non-fiction material, particularly social studies texts where proper nouns would seem to present considerable difficulty. Consider the following passage from page 6 of the grade four text, The Seigneury of Longueuil (Smith: 1971):

> "One of the first families to settle was Jaques Viau; his wife, Marie Madeleine; and their three children, Bertrand, Marie, and Michel. On March 12, 1675, M. Viau, who was formerly a soldier with the Regiment de Carignan-Salieres, assembled at the manor with ten other farmers to obtain his contract".

By no stretch of the imagination can one assume that such proper nouns found in content area materials do not increase the difficulty of the material; they are not sight words as might be Dick or Jane or Janet in the basal readers. One only begs the question by the assertion that perhaps such words should be taught as sight words with the selection. Other words in the selection need also to be taught - contract, obtain, settle, etc., but are included in estimating difficulty.

A recent personal communication from Professor Fry (1973) indicates that proper nouns are now included in the revised directions for his formula. Including proper nouns in the analysis done in this study would <u>increase</u> the difficulty ratings as reported in Tables 1 and 2. The ratings, if in error, are too low.

One might ask how other formulae, the Dale-Chall (1948), for example, would rate the texts analyzed. A check was run, applying the Dale-Chall formula to six of the grade four books, with estimates running approximately one grade lower for each book. It would seem, however, that the Dale-Chall formula <u>underestimates</u> the difficulty of non-fiction material such as social studies texts for two reasons. Proper nouns are t taken into account, which only would seem valid in fiction or in simple descriptive material where proper nouns might be few and, in general, familiar words known by sight. In addition, the Dale-Chall formula was based on a criterion of 50% comprehension. Recent research at the University of Illinois by Dunkeld (1970) indicates that 50% comprehension is insufficient - maximum learning occurs when the student can comprehend at the 60% level. Maximum information gain would tend to peak at or slightly beyond the 60% level, as shown by Bormuth (1969). Additional support for the contention that the Dale-Chall formula underestimates reading difficulty is provided by a recent study done in British Columbia by Bailey and Shearman (1973), estimating the difficulty of grade eight science materials using cloze and the Fry (1968) <u>Readability Graph</u>. The results indicated that both the Dale-Chall formula and the Fry (1968) <u>Readability Graph</u> (before revision to include proper nouns) <u>underestimated</u> the difficulty of the text.

More extensive use should be made of the cloze procedure to evaluate the difficulty of social studies texts with elementary students. It could be expected that the results would confirm the analysis presented and show them to be <u>conservative</u> - probably closely in line with application of the revised Fry formula. Classroom use of the cloze procedure has been described in recent issues of the <u>English Quarterly</u> (1973) and <u>Elementary English</u> (1973).

# RECOMMENDATIONS

At the grade seven level, appropriate level books can be
selected to meet the reading abilities of students. At the four to
six levels the "easier" books can be used, although they are still too
difficult. Effective consistent systematic teaching of vocabulary and
concepts can ensure more comprehension, as can the development of
understanding of the specific kinds of organization patterns used in
paragraphs and larger portions of content materials - developing what
Catterson (1971) calls the rhetoric of reading. For many students,
however, these texts remain of unsurmountable difficulty. The most
profitable teaching and the most effective learning can be accomplished
only when the instructional materials present here and there a little
challenge, but do not continually overwhelm.

As a result of Bailey and Shearman's study (1973), the
Department of Education of British Columbia has received a recommendation
from the B.C. English Teachers Association to the effect that "no new
textbooks be issued in British Columbia schools without a readability
rating that gives a clear idea of the applicability of the book in the
classroom". What is needed is provision of the mean readability of
the text, as well as citation of the readability of numerous samples
within the book, and the range, so that teachers and others selecting
books can be aware before they decide to use a book, whether it is
suitable or not.

Publishers trying to place books should be required to submit
such data and to revise books if they are unsuitable, or the books should
be transferred for use at more appropriate levels. For example, the Ginn
Sample Studies prescribed for use in grades 4-5 would appear to be of
appropriate readability levels for grade 10, where they are also
prescribed, since they run 7-9 in readability, with portions going higher.
A large percentage of the books would seem suited to average and slightly
below average readers in grade ten, but not to grade four and grade five
children.

A subcommittee of the curriculum committee of the B.C.
Department of Education should be authorized to take a close look at the
readability of a book before it is accepted for prescription.  Support
by the British Columbia Teachers' Federation and the British Columbia
English Teachers' Association for these reforms should be solicited.

Considering that the B.C. Department of Education is concerned
with the needs of children, one may be optimistic that these improve-
ments will be made.

# REFERENCES

Bailey, Steven, and Stewart Shearman, A Readability Study of a
     Grade Eight Science Reader, 1973, in press.

Bormuth, J.R. Development of Readability Analysis. United States
     Department of Health, Education and Welfare, 1969, 48-50

Catterson, Jane H. Rhetoric and Reading Comprehension, or Reading
     Skills in Search of a Content. McGill Journal of Education.
     6, 1971, 1-8.

Covell, Harold, Your Pupils, Their Reading Ability and the Social
     Studies. The B.C. Teacher. 1965, 16-18.

Dunkeld, C. The Validation of the Informal Reading Inventory for the
     Designation of Instructional Reading Levels: A Study of the
     Relationships between Children's Gains in Reading Achievement and
     the Difficulty of Instructional Materials. Unpublished doctoral
     dissertation, University of Illinois, 1970.

Flesch, Rudolf F. A New Readability Yardstick. Journal of Applied
     Psychology, 32, 1948, 221-122.

Fry, Edward. A Readability Formula That Saves Time: Readability Graph.
     Journal of Reading, 11, 1968, 513-516.

Fry, Edward. Reading Instruction for Classroom and Clinic. New York:
     McGraw-Hill Book Company, 1972.

Fry, Edward. Letter to the Author. September 20, 1973.

Harris, Albert J. How to Increase Reading Ability. New York:
     Macmillan, 1972, 460.

Johnson, Roger E., and Eileen B. Vardian, Reading, Readability and
     Social Studies. The Reading Teacher. 26, 1973, 483-488.

Oulton, R.C. Iron Mining in Quebec Labrador. Toronto: Ginn and Company,
     1968.

Pennock, Clifford D. Selecting Instructional Materials to Meet Students'
     Reading Performance Level. Alberta Journal of Educational
     Research, 1973, 19, 30-36.

Pennock, Clifford D. The Cloze Test for Assessing Readability,
     English Quarterly, 1973, 5, 35-39.

Pennock, Clifford D. Using Cloze to Select Appropriate Level
     Instructional Materials. Elementary English, 1973, 50, 940-941.

Russell, W.J. Wheat Farming Near Regina. Toronto: Ginn and Company, 1969.

Slade, Kenneth and Donald C. Wilson, The Reading Difficulty Levels of
        Some Social Studies Resource Texts, Grade 8-11.   Exploration,
        Journal of the British Columbia Social Studies Teachers
        Association.   13, 1973, 7-14.

Smith, D.C.   The Seigneury of Longueuil.   Toronto:   Ginn and Company,
        1971, 6.

Spache, George D., A New Readability Formula for Primary-Grade Reading
        Materials.   Elementary School Journal, 53, 1953, 410-413.

Taylor, Thomas G., D.J. Severight and Trevor Lloyd.   Southern Lands.
        Toronto:   Ginn and Company, 1961.

Appendix

SOCIAL STUDIES TEXTS PRESCRIBED
FOR USE IN BRITISH COLUMBIA

GRADE FOUR TEXTS RANKED FROM LOWEST MEAN READABILITY
TO HIGHEST MEAN READABILITY

| | Text | Mean | Range |
|---|---|---|---|
| 1. | The Changing People | 6.3 | 4-9 |
| 2. | Seafaring Warriors of the West | 7.2 | 3-10 |
| 3. | The Navigators | 7.3 | 6-11 |
| 4. | Caleb Seaman: A Loyalist | 8.0 | 4-13 |
| 5. | Nomads of the Shield | 8.3 | 5-12 |
| 6. | Colonists at Port Royal | 8.3 | 7-10 |
| 7. | Seigneury at Longueil | 8.8 | 6-13 |

GRADE FIVE

| | | Mean | Range |
|---|---|---|---|
| 1. | Mining in the Shield - Timmins | 6.3 | 5-7 |
| 2. | Making Steel at Hamilton | 6.7 | 5-9 |
| 3. | Canada and Her Neighbours | 7.0 | 3-11 |
| 4. | Fruit Farming in the Okanagan | 7.3 | 6-9 |
| 5. | Sardine Fishing and Packing in New Brunswick | 7.3 | 7-8 |
| 6. | Southern Lands | 7.5 | 6-10 |
| 7. | The Voyageurs | 7.6 | 4-11 |
| 8. | The Fur Fort | 7.7 | 4-13 |
| 9. | Oil Near Edmonton | 7.8 | 6-11 |
| 10. | Assembling Automobiles at Oakville | 8.0 | 4-12 |
| 11. | Mixed Farming Near Carman, Manitoba | 8.0 | 6-11 |
| 12. | Life at Red River 1830-1860 | 8.0 | 6-10 |
| 13. | Making Pulp and Paper at Corner Brook | 8.1 | 7-10 |

GRADE FIVE (cont.)

| | | Mean | Range |
|---|---|---|---|
| 14. | Tourism in Nova Scotia | 8.1 | 6-10 |
| 15. | This Land of Ours | 8.3 | 6-13 |
| 16. | Wheat Farming Near Regina | 8.7 | 6-13 |
| 17. | Salmon Fishing in British Columbia | 8.8 | 6-12 |
| 18. | Market Gardening in the Fraser Delta | 8.9 | 6-13 |
| 19. | A Forest Industry in Port Alberni | 9.0 | 8-9 |
| 20. | Iron Mining in Quebec-Labrador | 9.0 | 7-10 |
| 21. | Aluminum and Power in the Saguenay | 9.0 | 6-11 |
| 22. | A Port City - Montreal | 9.4 | 8-10 |
| 23. | Power at Niagara | 9.8 | 6-13 |

GRADE SIX

| | | Mean | Range |
|---|---|---|---|
| 1. | The Story of China | 7.1 | 3-10 |
| 2. | The Story of Indonesia | 7.2 | 5-11 |
| 3. | The Story of Japan | 7.2 | 5-11 |
| 4. | Southern Lands | 7.5 | 6-10 |
| 5. | The Story of West Africa | 7.6 | 6-11 |
| 6. | Lands of Europe and Asia | 8.1 | 6-13 |
| 7. | Lets Visit Russia | 8.2 | 6-11 |
| 8. | The Story of Ethiopia | 8.6 | 5-12 |
| 9. | Lets Visit USA | 9.1 | 6-13 |
| 10. | The Story of Scandinavia | 9.1 | 7-11 |
| 11. | Lands of Latin America | 10.5 | 7-13 |

# GRADE SEVEN

| | Mean | Range |
|---|---|---|
| 1. In Ancient Mesopotamia | 5.7 | 5-7 |
| 2. Ancient Civilizations - The Stone Age | 6.0 | 4-7 |
| 3. Medieval Pilgrimage | 6.0 | 4-7 |
| 4. In Ancient Crete | 6.0 | 5-7 |
| 5. Living History | 6.3 | 3-7 |
| 6. Universal History, Vol. III, Ancient Rome | 6.3 | 5-7 |
| 7. What Happened in B.C. | 6.3 | 5-7 |
| 8. Medieval Village | 6.6 | 4-8 |
| 9. Ancient Rome | 7.0 | 6-7 |
| 10. Middle Centuries - Gold, Silver and Precious Stones | 7.0 | 6-8 |
| 11. What Happened in Feudal England | 7.0 | 5-8 |
| 12. Medieval Town | 7.1 | 6-9 |
| 13. Medieval Monastery | 7.3 | 6-9 |
| 14. Medieval Castle | 6.5 | 5-9 |
| 15. The Second Greatest Invention | 7.5 | 6-11 |
| 16. Long Ago in the Old World | 7.7 | 5-11 |
| 17. Medieval Tournament | 7.7 | 7-8 |
| 18. Ancient Crete and Mycenae | 7.8 | 6-9 |
| 19. Medieval Feast | 8.0 | 7-9 |
| 20. The Development of Western Civilization | 8.1 | 7-11 |
| 21. Sumer and Babylon | 8.2 | 5-12 |
| 22. Pageant of the Past | 8.4 | 6-11 |
| 23. Ancient Athens | 8.6 | 6-10 |
| 24. Ancient Egypt | 8.8 | 8-10 |

GRADE SEVEN (cont.)

| | Mean | Range |
|---|---|---|
| 25. The Story of Ancient Athens | 9.1 | 8-10 |
| 26. They Lived Like This - In Ancient Egypt | 9.6 | 9-10 |
| 27. The Mediterranean - Its Lands and Peoples | 10.5 | 7-13 |

# THE IMPACT OF "SESAME STREET" ON PRIMARY PUPILS IN VANCOUVER

### E. Norman Ellis

### Vancouver School Board

## Introduction

Sesame Street is an educational television programme produced by the Children's Television Workshop, New York. It is funded by:

the United States Office of Education,

the Carnegie Corporation of New York,

the Corporation of Public Broadcasting, and

the Ford Foundation.

The programme is directed to preschool children, particularly the disadvantaged ones. It is designed to help children with formal learning before entering school. The programme is entertaining and loaded with fun. It provides many interesting ideas and new experiences for children. The programme also teaches specific skills, basic concepts, and desirable attitudes.

The Electric Company is a similar programme designed for beginning pupils who are learning to read. It aims to develop verbal avilities, i.e., knowledge of the alphabet, phonetics and word-attack skills.

Sesame Street is currently seen in Vancouver on Channel 2 at 11 a.m. daily, Monday through Friday and on Channel 9 at 9 a.m. and at 4 p.m. each weekday.

The Electric Company programme is seen on Channel 9 at 12.30 p.m. each school day.

The Audio-Visual department of the Vancouver School Board makes video-tape recordings of both of these programmes. These tapes are available to the schools on a loan basis. During the last school year there has been an increased demand for these tapes. During the first month this term, there have been twenty requests for video-tape recordings of Sesame Street and thirty-three of The Electric Company programme.

This increase may be attributable to the greater accessibility of equipment.

In 1972, School Trustees in Vancouver asked for a study of the impact of these programmes on the performance of pupils at the primary level.

### Outline of the Study

1.     The literature relating to these programmes has been reviewed and it would appear that in its development Sesame Street has been well-researched.   The Educational Testing Service has made two comprehensive evaluations of Sesame Street and one of The Electric Company programme.   The findings have been generally favourable.

2.     A questionnaire was sent during the last week of January, 1972, to the principals of all elementary schools in Vancouver  to determine the extent to which these educational television programmes are being viewed in school time.

3.     In order to determine the extent to which Sesame Street is viewed at home, a questionnaire was sent in late January, 1972, to parents of children enrolled in one afternoon kindergarten class in each of eight representative schools.   These schools were randomly selected, one from each of the eight districts of the city.   In those schools having more than one afternoon kindergarten, the selection of the class was made on a chance basis.   It should be noted that only afternoon kindergartens were considered for the reason that these pupils would not have any opportunity to see Sesame Street in school time.

4.     In ea.. of the eight selected kindergarten classes, the teacher
                 during the month of February 1972 eleven performance
                 pupils, selected by the writers on the basis of
                 ided on the parent questionnaires.   Five of
       children were ones who watched Sesame Street most
       frequently at home.   The other five pupils viewed the programme
       infrequently or not at all.   Each teacher was given materials
       and instructions for administering the tests as well as a form
       for recording purposes.

5.     The Coordinator and Consultants in Primary Education visited the classes, recorded their observations and reported on the reactions of teachers.

6.          A research intern interviewed selected parents to supplement
their responses to the questionnaire.

## A Review of the Literature

1.         <u>Development of the Programme</u>.    Sesame Street was established
as a result of a study by Joan Ganz Cooney for the Carnegie
Corporation in 1967, which showed that 97% of American homes
(90% of those with low income) had TV sets and that television
was the one continuous source of knowledge about the world for
disadvantaged children.    Three years earlier, Benjamin Bloom
had suggested that by age four at least one-half of a child's
potential growth in intelligence may have occurred.    He
emphasized the critical nature of the preschool years.

Accordingly, the original objective of the programme was "to
apply the production techniques and entertainment values of
popular commercial television to an instructional programme
for pre-school children that emphasized the needs of the urban
and rural disadvantaged child."    (Connell and Palmer, 14-15).

The combining of efforts of TV production and educational research
specialists was a primary aim of the experiment.    One hundred
advisors from a variety of fields cooperated to produce a set of
curriculum goals.    The Educational Testing Service was retained
for the independent evaluation of outcomes.    Pre-school children
in inner-cities were tested.    Their attention to
types of presentation was researched.    Trial programmes were
evaluated.    In November, 1969, the first regular showing of the
programme occurred.    From that date the producers committed
themselves to the continuous evaluation and revision of the
programme.

Robert Filep, of the Institute for Educational Development in
Los Angeles, has led the movement to involve parents in the
use of Sesame Street in the home.    Filep (1971).    His
materials serve to train mothers in ways of deriving maximum
benefit from the programme.    Graham, (1971).

The process by which Sesame Street was developed has recently been studied in detail by Kratochvil and others at American Institutes for Research, under a contract with the U.S. Office of Education. Kratochvil, (1971).

Evaluation of the Programme

(a)   Independent Research

(1)   The ETS evaluation of the effects of the programme after its first year of broadcasting was published in October, 1970.

The over-all impact of the programme was described as follows:

"Children who viewed Sesame Street achieved many of the stated goals in letters, numbers, and forms, and they gained appreciably in their skill in sorting and classifying.   Transfer of learning was noted in some instances but basically the large gains occurred in those areas that were directly taught.   There was no evidence of side effects ..."   Ball and Bogatz, (1970).

Ages three through five all benefitted, the younger more so than the older.   Transfer and indirect learning occurred more in the older children within that age bracket.   In specific knowledge and skills taught directly, three-year-olds who viewed regularly had higher achievement than five-year-olds who did not view regularly. No significant differences were found related to sex.

Children with lower prior achievement gained more.   Those with higher prior achievement gained best from moderate rather than total viewing;   the gains added by greater-than-moderate viewing were small.

Findings related to socio-economic status were similar to those regarding prior achievement.   Children from homes of low socio-economic status who viewed regularly surpassed high SES children who did not view the programme at all.

Among those who viewed at home (as opposed to viewing in pre-school), the results were very positive.   Disadvantaged home-viewers gained

more in some respects than children in the same communities who attended pre-school. Among those who viewed in pre-school, gains were related to viewing, although the rate of gain levelled off between moderate and high-frequency viewing (moderate viewing gave best results for unit of time spent). Teachers' opinions were generally positive.

The results were especially positive among Spanish-speaking children, the one non-English group studied. Although the group was small (N=45), this finding suggested that these programmes were of special benefit to children for whom English is not the first language.

(2) A summary of the major findings in the ETS evaluation of the second year of Sesame Street was published in November, 1971.

The second-year evaluation (Ball and Bogatz, 1971) supported the basic findings of the first-year evaluation. In addition, the second-year evaluation found that:

- Teachers perceived that those pupils who had viewed Sesame Street frequently during the previous year were better prepared for school than the infrequent viewers; and teachers did not perceive them to be "turned off" by conventional classroom instruction.
- The first-year viewers who watched at home during the second year gained in most of the new, more complex goal areas added in the second year; those who were new viewers in the second year did not achieve the more complex goals but did gain in the original goal areas.
- Encouragement of children's viewing by community people, was an important factor affecting the gains among viewers.
- There were gains in favourable attitudes toward school and toward people of other races among at-home viewers.
- There appeared to be no differences in the programme's impact on black and white disadvantaged children.
- Disadvantaged children, if they watched as frequently, fared as well as their advantaged peers.

- The study provided limited evidence that the programme had a
  positive effect on the mental age of its viewers, as measured
  by vocabulary level.

The Periodical Report on Education Research (1971) criticized the
second-year ETS evaluation for side-stepping the issue of whether
advantaged children gained as much as disadvantaged children, thus
leaving the gap between the two groups undiminished.

(3)   A study by R.B. Trout (1971) of the effects of Sesame Street
on new kindergarten children was carried out in the suburban school
district of Park Ridge, Illinois.

The connection between the Sesame programme and the performance of
the children was only inferred, not proven, but the findings are
worth reporting.   It was found that 95% of the new registrants in
kindergarten watched Sesame Street.   Interviews with over 700 of
these children revealed that unusually high percentages of them
could:  name all or nearly all capital letters (51%) and lower case
letters (30%), print (not copy) letters named (37%), name numerals
0 through 9 (73%), and associate quantity with numberals (74%).
There was no significant difference between sexes in either
achievement or viewing.   Implications of the findings were that
the gap between advantaged and disadvantaged children is not narrowing
as a result of the Sesame Street programme, and that the school
programmes for the first year or more would need change.

(4)  An evaluation of the Electric Company (Ball and Bogatz, 1973)
concluded that:

- Television is an effective classroom tool in helping first
  through fourth grades learn to read.
- The study indicated that as a result of watching The Electric
  Company in school during the 1971-72 inaugural broadcast year,
  viewing classes made significantly greater gains than non-viewing
  classes in nineteen reading skills the programme was designed to
  teach.   The programme had a clear and significant impact on its
  primary target audience -- second grade children who were in
  the bottom half of their class as indicated by standardized

reading test scores--indicating the programme was an effective instructional supplement for children who were beginning to experience reading difficulty.

- The programme had a significant impact on third and fourth grade classes that viewed in school, although the effect was somewhat less than in the lower grades.
- The programme was successful in producing gains among first and second grade classes across almost all of the nineteen curriculum areas built into the programme and tested in the ETS study. Some positive effects on a standardized reading test were also found.
- The programme had a similar effect on all groups who viewed in school -- Spanish background, blacks, whites, boys, and girls.
- The programme won a generally favorable reaction from teachers who found it useful in teaching and reviewing certain reading skills.

(b) Criticisms

According to O'Bryan (1971), criticism of Sesame Street tends to come from those who emphasize freedom and structure-less experiences fitted to the individual child -- psychologists and educators whose basic approaches to their fields differ from those of the programme. He has identified the following criticisms of Sesame Street:

- that mechanical memory training is stressed and generalizable concept development ignored,
- that rapid-fire, fragmented patterning of material avoids teaching concentration skill,
- that t...                          ty, a passiveness which is
  ...                               ...ples,
- that ...                          ...tured,
- that feelings of actors in the programme are not played with sufficient emotion,
- that poor parent-child relationships can result if the parent has unreasonable expectations for the programme,
- that the programme's approach is too much like commercial advertising.

The British Broadcasting Corporation's director of children's programmes, Monica Sims, refused to air Sesame Street on the grounds that it "indoctrinates" and has "authoritarian aims". (Newsweek, Sept. 20, 1971). As Sims sees the programme, "Right answers are demanded and praised....Our job is not only to teach a set of facts but to stimulate children's activity and enthusiasm to learn and do things for themselves". Sims claims that the programme is characterized by middle-class attitudes and lack of reality. The London Sunday Times, however, disagreed, calling the BBC's "Play School" programme "genteel, middle-class pap compared with the vigor of the American show". It should be noted that Sesame Street is now being telecast on the BBC network.

Dr. Herbert Sprigle (1971) criticized Sesame Street on the grounds that "passive, effortless learning" isn't retained as well as that which is "physically and mentally involved". (Grade Teacher, March 1971, p.20). Sprigle has also found, through a study of 48 children in Florida, that disadvantaged children don't learn more from Sesame Street than from traditional pre-schooling. (It should be noted that no one has ever claimed such an accomplishment for the programme).

Samuel Kliger (1970) has questioned whether Sesame Street's producers understand the language-learning process, since generalization inside the child does not come about by imitation of outside stimuli. He feels that the delightfulness of the programme obscures the lack of good language-learning experiences.

Richard Ratliff (1972) argues that Sesame Street teaches aggression. He cites examples of programme sequences which he interprets to be cases of aggression, some obvious and some subtle; and he reasons on the basis of research findings in various studies that children, particularly those who are disadvantaged and have lower self-esteem, learn aggression by imitation from viewing the programme.

(c) Supportive Opinion

As O'Bryan (1971) has pointed out, the producers see positive value in the programme's emphasis on exact repetition and repetition with variation; it is thought to generate participation and anticipation, as well as

memorization. The "fragmented" patterning of the presentation is based on formative research concerning attentiveness. The participation of the viewer is thought to occur through identification with selected characters in the programme. Humour and incongruity, which are heavily relied on, are presumed to entertain, hold attention, motivate; provoke curiosity and expectation, and imbue language learning with pleasure and social qualities. The variation aspect of repetition and the emphasis on associational enlargement are thought to counter the criticism that generalizable concept development is ignored.

The reply of Joan Cooney, the creator of Sesame Street to the rejection of the programme by the BBC was: "Sims and colleagues are still caught up in the old-fashioned permissive nursery-school complex. In a society where home life is often too relaxed, serious educators must be interested in structured education." (Newsweek, Sept. 20, 1971)

Nicholas Johnson (1971) has expressed the opinion that Sesame Street is a needed antidote to commercial TV, which he feels teaches violence, pill-escapism, and materialism. He thinks Sesame Street encourages attitudes of friendliness, self-esteem, sense of belonging, and fairness; teaches intellectual, manual and nutritional skills; and uses music, rhythm, and humour effectively. Johnson proposes that more programmes like Sesame be created for other age groups.

- Sidney P. Marland, as Commissioner of Education, told a Senate Appropriations Committee that Sesame Street was "the best research investment of the United States Office of Education".

Summary of Responses to the Questionnaire for Principals

A questionnaire was sent during the last week of January, 1972, to the principals of all elementary schools in Vancouver to obtain information about the nature and extent of the in-school viewing of these programmes. Returns were received from 67 principals (93% return). In addition, there were eleven separate returns from primary annexes and one from the Reading Centre. The total number of completed questionnaires was 79.

At that time the Sesame Street programme was being viewed to some extent in 34 schools (43%).

Most of those children who viewed the programme, watched it only once or twice per week. Only five groups saw the programme every school day, and five other groups viewed it as many as three or four times per week.

The total number of children who viewed the programme in school was approximately 2,000. The typical viewing group was a class, although several schools showed the programme to two or three classes together.

Almost no pre-viewing activities were done. Post-viewing activities occurred in a few groups; the most common post-viewing activities were a review of the programme materials and discussion.

The Electric Company programme was being viewed in eight schools, and four of them used it irregularly. Two groups viewed the programme three to five times per week. The typical level of viewing was Grade 3.

A total of about 300 children have seen the programme in school. The size of viewing groups has ranged from 14 to 90. Virtually no pre- or post-viewing activities have been used.

Several respondents remarked that the lack of cablevision in Vancouver schools prevented them from using the progr   regularly. They had to borrow a video-tape recorder and video-tapes,   t   d to show several Electric Company programmes in a cluster.

At the time of the survey, only six (9%) of the schools had their own video-tape recorders. However, approximately one-half of the elementary schools now have VTR equipment (October, 1973).

## Summary of Responses to the Questionnaire to Parents

In order to obtain information about the nature and extent of at-home viewing of Sesame Street, a questionnaire was directed during January, 1972,

to parents of children enrolled in one afternoon kindergarten class in each of eight representative schools. There were returns from __all__ of the schools. Of 203 questionnaires distributed, there were 173 (85%) completed and returned.

A Summary of the responses to these questionnaires follows:

1. Has your child watched Sesame Street?

| Response | Frequency of Response | Percentage |
|----------|----------------------|------------|
| "yes" | 165 | 95% |
| "no" | 8 | 5% |

It would seem that nearly all of the kindergarten children have had some exposure to Sesame Street.

2. In general, what has been your child's pattern of watching Sesame Street?

Frequency of Viewing Per Week

| School Year | Child's Age | 0 | 1 | 2 | 3 | 4 | 5 | No Response |
|-------------|-------------|---|---|---|---|---|---|-------------|
| 1969-70 | 3 | 17 | 3 | 11 | 25 | 9 | 39 | 69 |
| 1970-71 | 4 | 6 | 4 | 10 | 16 | 28 | 69 | 40 |
| 1971-72 | 5 | 11 | 5 | 17 | 22 | 26 | 66 | 26 |

Of all the returns, 73 children (42%) watched Sesame Street three to five times a week during the 1969-70 school year, the first year that the programme was on television. During the following school year (1970-71), many more of these children watched Sesame Street regularly. At that time, 113 children (65%) watched the programme three to five times a week. Viewing frequency was reported to be similar in the 1971-72 school year with 114 children (66%) watching Sesame Street from three to five times a week. From these returns, it would appear that the interest in viewing Sesame Street was persisting.

3. Please indicate whether the child watched the programme regularly on a colour set or on a black-and-white set.

| Kind of Television | Frequency of Response | Percentage |
|--------------------|----------------------|------------|
| Colour | 38 | 23% |
| Black-and-White | 125 | 77% |
| No Response | 10 | - |

Of parents who responded to this question, more than three-quarters of them had children who watched the programme on a black-and-white television set.

4. How many letters of the alphabet does your child know?

| Number of Letters | 0 | 1-5 | 6-15 | 16-25 | 26 | No Response |
|---|---|---|---|---|---|---|
| Frequency of Response | 5 | 13 | 21 | 26 | 102 | 6 |
| Percentage of the Total Response | 3% | 8% | 12.5% | 15.5% | 61% | - |

According to the parents who answered this question, the majority of the children (102 or 61%) knew all 26 letters of the alphabet. Only five (3%) admitted that their children didn't know any of the letters of the alphabet.

5. How many numbers does your child know?

| Number of Numers | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 | No Response |
|---|---|---|---|---|---|---|
| Frequency of Response | 2 | 2 | 1 | 4 | 161 | 3 |
| Percentage of Total Response | 1% | 1% | 1% | 2% | 95% | - |

It would seem that nearly all of these children (161 or 95%) knew nine or ten numbers. Many parents commented that their children knew more than ten numbers.

6. Can your child read?
(If yes, please list some of the words and one of the books from which he has been reading.)

| Response | Frequency of Response | Percentage |
|---|---|---|
| "yes" | 22 | 13% |
| "no" | 150 | 87% |
| No response | 1 | - |

Most of these children (150 or 87%), according to their parents, could not read. It would seem that of those children who could read, many could read just a few specific words. However, a few parents who said that their children couldn't read offered similar lists of words but did not regard this as reading. Some parents mentioned that their children were able to read one or more "Dr. Seuss" books.

7. How often per·week did you watch the programme with·your child?

| Number of Times Per Week | 0 | 1 | 2 | 3 | 4 | 5 | No Response |
|---|---|---|---|---|---|---|---|
| Frequency of Response | 47 | 31 | 41 | 24 | 6 | 15 | 11 |
| Percentage of Total Response | 29% | 19% | 25% | 15% | 4% | 9% | - |

A majority of the parents who responded to this question (96 or 59%)
watched the programme with their child one to three imes a week.
A few (19 or 12%) said they watched four or five times a week.   A
significant proportion (47 or 29%) did not watch the programme at
all with their children.

8. How often per.week did you follow up the programme through talk or
other activity with your child?

| Number of Times Per Week | 0 | 1 | 2 | 3 | 4 | 5 | No Response |
|---|---|---|---|---|---|---|---|
| Frequency of Response | 60 | 24 | 34 | 19 | 7 | 14 | 15 |
| Percentage of Total Response | 38% | 15% | 22% | 12% | 4% | 9% | - |

Nearly half of the parents who responded to this question (77 or 49%)
said that they followed up the programme through talk or other
activity with their children one to three times a week.   Another
large group of parents (60 or 38%) did not follow up the programme
(at least not enough to record on a weekly basis).   A smaller number
of parents (21 or 13%) followed up the programme through activities
with their children four or five times a week.   Several parents
commented that the programme frequently initiated topics which the
child wished to pursue further in discussion with his parents.

Three of the schools asked as an initial question, "Do you have a
television set in home?"   It is noteworthy that all of the 64 parents
responded, "Yes".

The Follow-Up by Kindergarten Teachers

The teacher of each of the eight selected kindergarten classes
administered during February, 1972, eleven performance tasks to ten of
her pupils;   five were regular viewers of Sesame Street and the other
five were reported by their parents to watch the programme quite
irregularly or not at all.

A comparison of the scores of the two groups (i.e. high-frequency viewers and low-frequency viewers) on the eleven performance tasks appears in Table I.

High-frequency viewers surpassed the low-frequency viewers on all eleven items, and for four of these the differences were statistically significant. Children who had viewed Sesame Street regularly, in comparison with others who had not, were superior in their knowledge of letters, numerals, and shapes, as measured by these tests at that time.

The teachers of these eight classes were asked if their pupils had derived other benefits from the viewing of Sesame Street. They noted various indications that high-frequency viewers had acquired a superior understanding of their physical and social environment, including awareness of the environment, increased interest in many things, more love of animals, greater understanding and consideration of others. The features of the programme that children liked best were the humour, the marionettes, and the characters, Big Bird, Oscar the Grouch and The Cookie Monster.

## A Summary of the Comments from Primary Specialists

The Coordinator and Consultants in Primary Education visited the classes, recorded their observations and reported on the reactions of teachers.

The Primary Coordinator and the Consultants visited twenty or more classes viewing Sesame Street and held discussions with teachers of these classes and with teachers of classes which had watched Sesame Street earlier in the year but had subsequently discontinued.

Teachers whose classes viewed Sesame Street on a regular basis were convinced of the programme's worth, especially in phonetics. Generally, these teachers had first-year children or children with learning disabilities. Upon talking with these teachers, however, the consultants found that no preparation or follow-up work was planned.

TABLE 1: A COMPARISON OF THE MEAN SCORES AND NUMBERS OF PERFECT SCORES FOR HIGH-FREQUENCY VIEWERS AND LOW-FREQUENCY VIEWERS ON ELEVEN PERFORMANCE TASKS

| | High-Frequency Viewers (N=40[2]) | | Low-Frequency Viewers (N=40[2]) | | Significance Level of the difference between the Means[1] |
|---|---|---|---|---|---|
| | Mean | No. Perfect | Mean | No. Perfect | |
| 1. Knowledge of Capital Letters | 23.5 | 21 | 16.6 | 12 | .005 level |
| 2. Knowledge of Small Letters | 18.7 | 14 | 11.5 | 8 | .025 level |
| 3. Words beginning with Specified Letters | 2.98 | 15 | 2.18 | 8 | n.s.d. |
| 4. Printing of Letters | 4.10 | 20 | 3.25 | 10 | n.s.d. |
| 5. Naming of Numerals | 9.25 | 27 | 7.70 | 19 | .05 level |
| 6. Association of Quantity with Numerals[2] | 2.84 | 22 | 2.52 | 19 | n.s.d. |
| 7. Can Name Square | | 38 | | 34 | n.s.d. |
| 8. Can Name Circle | | 39 | | 35 | n.s.d. |
| 9. Can Name Rectangle | | 35 | | 23 | .01 level |
| 10. Can Name Triangle | | 36 | | 29 | n.s.d. |
| 11. Names Round and Rectangular Objects | | 33 | | 25 | n.s.d. |

[1] The Chi Square statistic was calculated to assess the significance of the difference between the means.

[2] N=40 except for item 6 for which N=25.

Most teachers of beginners either do not have their classes scheduled for this programme at all or they allow classes to watch for a few months only. The main reasons seem to be:

- Most children have already been exposed to Sesame Street before entering school.
- Sesame Street is aimed at the three- or four-year-old, not the normal five- or six-year-old.
- The programme does not fit into the plans the teacher has for the class, either timewise or sequentially.
- The programme, having been developed specifically for American Inner City children, does not satisfy the requirements of many Vancouver children.

## Comments from Parents

A Research Intern interviewed the parents of twelve pupils (eight were high-frequency viewers, one from each class, and the other four were low-frequency viewers). There was general agreement, particularly among the eight parents of high-frequency viewers, that the programme was well-suited for pre-school children and that it did facilitate their learning.

## Conclusions

Sesame Street is an innovative television programme exerting considerable educational force at the pre-school level. This is not surprising when one considers the extensive research that accompanied its development. It was first released in the fall of 1969 and it quickly received wide acclaim. During the second season, the programme was presented on approximately 300 television stations in America and the popularity of Sesame Street continued to increase. Educators were quick to recognize the potency of its influence and to consider ways of realizing its benefits.

The present study (made during the third year of telecasting) suggests that Sesame Street is having considerable impact on kindergarten pupils in Vancouver. Almost every home has a television receiver, and approximately two-thirds of our four-year-olds and five-year-olds watch the programme regularly. It is also being viewed to some extent in nearly one-half of

the elementary schools of the city. Regular viewers of Sesame Street appear to have gained considerable advantage over other children in their understanding of letters, numerals, and shapes. To this extent, they are better prepared for school than the infrequent viewers among their classmates. Furthermore, their teachers claim that these children have derived other benefits: more awareness of their surroundings, greater sensitivity and consideration for others, wider interests and abilities.

The findings of this study serve in a small way to support those of the ETS evaluations that Sesame Street is effective in imparting basic facts and skills to children three to five years and that those who watch most tend to learn most. Sesame Street clearly demonstrates the effectiveness of television as a medium for teaching pre-school children. In view of its impact on kindergarten pupils in Vancouver, it would seem advisable to consider not only how the educational benefits of this programme may be maximized, but also how the tremendous potential of the television medium may be fully realized in our schools.

Ball, Samuel and Gerry Ann Bogatz.   The First Year of Sesame Street:
  An Evaluation.   Final Report, Vol. III of V Volumes.
  Princeton, New Jersey:  Educational Testing Service, 1970.

Ball, Samuel, and Gerry Ann Bogatz.   Reading With Television:  An
  Evaluation of The Electric Company.   Princeton, New Jersey:
  Educational Testing Service, 1973.

Ball, Samuel, and Gerry Ann Bogatz.   A Summary of the Major Findings
  From "Reading With Television:  An Evaluation of The
  Electric Company."   Princeton, New Jersey:  Educational
  Testing Service, 1973.

Ball, Samuel, and Gerry Ann Bogatz.   Summative Research of Sesame Street:
  Implications for the Study of Preschool-aged Children.
  Princeton, New Jersey:  Educational Testing Service, 1971.

Bloom, Benjamin S.   Stability and Change in Human Characteristics.
  New York, N.Y.:  John Wiley and Sons, 1964.

Bogatz, Gerry Ann, and Samuel Ball.   "Some Things You've Wanted to
  Know About Sesame Street."   American Education, 7:3
  (April 1971), pp. 11-15.

Bogatz, Gerry Ann, and Samuel Ball.   A Summary of the Major Findings in
  "The Second Year of Sesame Street - A Continuing Evaluation."
  Princeton, New Jersey:  Educational Testing Service, 1971.

Collins, B.M.; E. Morse and G. Knowles.   "Beyond Sesame Street:
  TV and Preschoolers."   Educational Leadership, 28:2
  (Nov. 1970), pp.143-146.

Connell, David D., and Edward L. Palmer.   "Sesame Street:  A Lot of
  Off-Beat Education?"   National Elementary Principal, 50:5
  (April 1971), p-.15-25.

Cooney, Joan Ganz.   The First Year of Sesame Street:  A History and
  Overview.   Final Report, Vol. I of V Volumes.   New York, N.Y.:
  Children's Television Workshop, Dec. 1970.

Filep, Robert T., and others.   The Sesame Mother Project.   Final Report.
  El Segundo, California:  Institute for Educational Development,
  1971.

Gibbon, Samuel Y., Jr., and Edward L. Palmer.   Pre-Reading on Sesame
  Street.   Final Report, Vol. V of V Volumes.   New York, N.Y.:
  Children's Television Workshop, Dec. 1970.

Graham, Mike.   "Sesame Street Best When Mom Helps."   The Sun, Oct. 20,
  1971.

Ingersoll, Gary M.   "Sesame Street Can't Handle All the Traffic."
        Phi Delta Kappan,   53:3 (Nov. 1971), pp.185-6.

"Is 'Sesame' Authoritarian?"  Newsweek, Sept. 20, 1971.

Johnson, Nicholas.   "Beyond Sesame Street."   National Elementary
        Principal, 50:5 (April 1971), pp. 7-14.

Kliger, Samuel.   "Tog Over Sesame Street."   Teachers' College Record,
        72:1 (Sept. 1970), pp.41-56.

Kratochvil, Daniel W.   Sesame Street Developed by Children's Television
        Workshop.   Product Development Report No. 10.   Palo Alto,
        California:  American Institute for Research in the Behavioral
        Sciences, 1971.

McDonald, D. Lynn, and F. Leon Paulson.   The Evaluation of Sesame Street's
        Social Goals:  The Interpersonal Strategies of Cooperation,
        Conflict Resolution and Differing Perspectives.   New York, N.Y.:
        Children's Television Workshop, April 1971.

O'Bryan, K.G   "Sesame Street:  Education or Entertainment?"   Orbit, 2:3
        (June 1971), pp.24 25.

Palmer, Edward L.   "Sesame Street:  Shaping Broadcast TV to Needs of the
        Preschooler."   Educational Technology, 11:2 (Feb. 1971), pp.18-22

Ratliff, Anne R., and Richard G. Ratliff.   "Sesame Street:  Magic or
        Malevolence?"   Young Children, 27:4 (April 1972), pp.199-204.

Reeves, Barbara Frengel.   The First Year of Sesame Street:  The Formative
        Research.   Final Report, Vol. II of V Volumes.   New York, N.Y.:
        Children's Television Workshop, Dec. 1970.

Samuels, Bruce.   The First Year of Sesame Street:  A Summary of Audience
        Surveys.   Final Report, Vol. IV of V Volumes.   New York, N.Y.:
        Children's Television Workshop, Dec. 1970.

"School Supervisor."   Grade Teacher, 88:7 (March 1971), p.20.

"Sesame Street Hits Bumpy Road on Way to New Goals."   Report on Education
        Research (December 8, 1971), p.11.

Tierney, Joan D.   "The Miracle on Sesame Street."   Phi Delta Kappan,
        52:5 (Jan. 1971), pp.296-298.

Trout, Ruth B.   "Sesame Street: It's Changing the School Program in This
        District."   American School Board Journal, 158:10 (April 1971),
        pp. 19-24.